Washington State Department of Revenue



Core Tax System Replacement Study

Current State Assessment Version 3.0

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1. Document Overview

1.1 Purpose

The Current State Assessment of Washington State Department of Revenue (DOR) Core Tax System is a fundamental prerequisite to defining the Future Vision for Core Tax System Replacement. This assessment serves as the foundation for the roadmap to the Agency's future business and technology architecture. The assessment of the Core Tax current state is critical to understanding the tax administration process and supporting technology. This will be used to help identify areas for improvement and high-level requirements during the Future Vision phase of this project. This document also provides lists of challenges and opportunities within each business process area to support that Future Vision.

As a predecessor to developing the future state it is important to understand how DOR currently performs business in order to truly understand what needs to be done to meet the vision for the future. Being able to see the current picture will allow DOR to put in place realistic phases for successfully getting to the future state. The goal is to document each process, challenge and opportunity for improvement and then use that to build the high-level requirements. The ultimate goal of this study is for DOR to design the future state, not to duplicate the current processes with another system, but rather build on what works and replace what does not with a solution that provides more value and allows the business to work smarter and provide better customer service.

1.2 Scope

The scope of this Current State Assessment is to provide sufficient information to set the stage for more detailed future process design, requirements definition, and help define future procurements. The scope includes analysis of DOR Core Tax System via meetings with business and technical staff and reviews of existing system documentation. DOR is a large and complex organization that employs numerous business processes using a variety of applications and technology products. Revenue Solutions, Inc. (RSI) is using a modeling approach that is intended to be clearly understandable by business owners and technology specialists within the Agency. The objective is to provide the reader with a high-level model of the current state of the enterprise without delving into specific workflows, exceptions, business rules, and detailed use cases.

1.3 Document Organization

The following document describes how DOR's business processes, with its current technical architectures, facilitate the collection of taxes. This document is the foundation toward developing a strategic roadmap for the future state. This document is divided into the following sections:

- Section 1: Document Overview This section describes the purpose and scope of the deliverable and its context within the Project.
- Section 2: Approach This section describes the approach the team took to become familiar with and document the current state.
- Section 3: Executive Summary This section provides an executive summary of the findings and recommendations of the Current State Assessment.
- Section 4: Core Tax System Overview This section provides an overview of the Core Tax System and Taxpayer Processing

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- Section 5 Business Processes This section describes the current processes of the Core Tax System from a functional perspective. It contains process diagrams and process challenges and opportunities.
- Section 6: Technical Architecture This section presents a summary view of the hardware, software, and systems supporting the Core Tax System Replacement.
- Section 7: Cost This section provides the Core Tax System Replacement pricing structure with FTE salary, consulting services, hardware purchase and maintenance, software license maintenance, and other goods and services.

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2. Approach

To gain an initial understanding of the Current State, the RSI team attended system demonstrations, studied existing documentation of the current suite of systems and current business functions, and reviewed applicable technical artifacts. Agency staff spent numerous hours demonstrating system functions and business processes, and answering dozens of detailed questions. Building upon observations, research and analysis made during the demonstrations and through source documentation, a series of Current State Assessment meetings and additional one-on-one follow-ups were held. In total, twenty-three business user meetings were held and a dozen technical meetings were held to assess the Agency's tax administration suite of systems and technologies. In addition, several meetings were held with the Liaisons to better understand feedback from the business and technical users and to provide additional direction to RSI on further areas of analysis. Following each meeting, RSI drafted the minutes, revised the process flows and distributed the minutes to all attendees for comments and verification. The process flows, issues, and minutes are the basis for this Current State Assessment.

The functional area meetings included the major functional areas that were confirmed with the Project Stakeholders as the core functional areas for the Agency. The purposes of the meetings were to understand the business drivers and process flow, how the system is supported, challenges, and opportunities. Each meeting consisted of a group of individuals with an interest and expertise in the specific functional area. They included Agency subject matter experts, Agency management, and the RSI team.

The twenty-three functional area meetings focused on the following areas:

- Audit Selection
- Audit Case Management
- Cash Management
- Compliance Overview
- Compliance Initial Contact Team
- Compliance Out of State/Mainstream
- Compliance Tax Discovery
- Compliance Review and Recovery Team
- Compliance Bankruptcy
- Compliance Front Desk
- E-file & Electronic Payments
- Fish, Tobacco, and Agreements
- Image Capture & Processing
- Registrations
- Reseller's Permit, Cash Bond, and Warehouse Credit
- Returns Processing
- Revenue Accounting (2 meetings)
- Special Credits & Assessments
- Streamline, Training & Litter Tax
- Warrants
- Meetings with Liaisons (2 meetings)

The technical area meetings included reviewing the technical activities which support the functional areas discussed above. The main purpose was to understand the challenges and needs of Information Services (IS) as they relate to supporting the business processes. Each meeting consisted of a focus group of individuals with an interest and expertise in the specific technical area.

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3. Executive Summary

The Current State Assessment is a fundamental prerequisite to defining the preliminary Future Vision and creating a foundation for the roadmap to the Agency's future business and technology architecture. Understanding of the current state serves as a direct foundation for the Future Vision by identifying current inefficiencies and challenges as well as identifying functionally that works well. The Current State Assessment also contributes to the business case analysis by identifying variances from the Future Vision. In undertaking the Current State Assessment, the RSI team took a number of steps to gain knowledge and understanding about the current system. Our examination included identifying the business functions the current system performs, the areas that require improvement, and the business reasons that drive the current system design.

3.1 Functional Assessment

From the team's initial assessment it has been determined that all functional areas are covered and both IS and the business users have been creative in their ability to leverage system functionality and technology to cover the ever changing needs of tax administration. With that said, we also observed there's a strong reliance on the business users to make existing technology work. In other words, the business users utilize Access DBs, Excel spreadsheets, system macros, and manually move documents across network locations to get documents imaged in support of their ability to work an account. From a user experience perspective, there are too many screens, too many systems, and the taxpayer account is spread across too many subsystems which doesn't allow for easy automation of business rules. With interdependent business rules buried across multiple systems, legislative changes are difficult to implement as it's difficult to anticipate what the downstream impact may be on changing a business rule.

From a technical perspective the agency has pulled several systems and technologies together in order to meet the tax administration needs of DOR. The technology is dated and skilled resources could be in jeopardy of leaving (or retiring) in the coming years, putting the ability to support the system long-term at risk. In addition, system changes (e.g., legislative changes or enhancements) are extremely time-consuming and difficult to test given the test and production environments are varied in their code and data sets. Staff feels as though the testing efforts are rushed and that there's limited confidence when rolling changes into production. There have been so many "patches" to production over the years that it's difficult to replicate those changes in a demo environment to ensure that the change will work in production.

From a traceability standpoint, users feel that it is sometimes difficult to trace the information going to Agency Financial Reporting System (AFRS) to its source on the TANDEM systems. This adds a level of anxiety among those working to make taxpayer adjustments on accounts.

3.2 Technical Assessment

The technical portion of the analysis uncovered several key evidences of significant issues. These symptoms are the result of the root issues in the overall technical architecture of the Core Tax System. The initial evidence is the fact that business customers (users/operators) know the technical limitations of the existing systems. While many business staff have become technology consumers and highly aware of the potential, most do not or should not necessarily be familiar with or know the technical limitation of the systems they use at work. Many sight the complexity of simple changes, inability to test effectively, long lead times on changes, major involvement by one or more business areas and impact on business procedures, spreadsheets and data. The business knows these problems have existed for long periods (years) and are talked about sufficiently to allow non-IS staff to be able to clearly communicate system problems. The non-IT staff also know that many problems can't or won't get fixed. In response to this limitation of the Core Tax IT, the business areas continue to develop their own solutions to problems by

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expanding the use of Excel, Access, macros and procedures to meet business needs. Another symptom of the current System health is the shift of business data ownership, stewardship and management toward the business user. This is seen by the dependence on the data in Excel, Access, and key reports. Not only are these new data sets owned and maintained by the business areas, they are also created by them in many instances by keying system data sent to them in other formats. Because the performance of needed changes, simple business improvements are often done outside of the Core Tax System.

To compound the issue of enhancing or replacing the Core Tax System, there are several severly limiting factors. There is little or inadequate documentation of data structures, business rules, and interface standards. One benefit of the assessment is that system inventory and context diagrams have been created or updated during the process. However significant insight is still required to create migration strategies, identify interdependencies, and describe interfaces. Another limiting factor is that development methods are diverse, inconsistent and lack rigor for system redevelopment, reengineering or replacement. A significant diversity lies in how enhancements are designed, developed, documented, and deployed.

The root causes of these issues can be traced to entropy of the aged Core Tax System. The simple fact is: if the original designers knew that the system would have had to do all this they would have designed it differently. System changes, platform upgrades, change in functionality and lack of clear documentation have resulted in a very complicated system environment. Additionally, many sub-systems have appeared over the years that propetuate the complexity. Each system and subsystem contains their own copy of mission critical data, business rules and may operate on different technologies. Continuous compromise is part of the new updates and augmentations for the Core Tax System. It is difficult to know how broadly a change might impact other systems and therefore difficult to estimate, plan and conduct sufficient testing. Minimal remediation work is done to correct the system inefficiencies, remove data redundancy, retire older technologies, streamline processes, or develop agency standards (IT and Business). Again, this is not a simple issue to overcome or to prevent when systems reach the maintenance only segment of the life-cycle. In effect, the DOR Core Tax System has reached (for the most part) end of useful life in that the cost to maintain exceeds the costs associated with system replacement.

It should be noted that due to the current Core Tax System configuration, many functions and features should be, but can not easily be upgraded. There is a need to improve data sharing between internal and external systems, which needs modernization and the adoption of standards. There are many manual process and information hand-offs (i.e., reports, spreadsheets) that could be automated. Users of the systems, whether internal (DOR), external (other agencies or jurisdictions), or actual business/corporate representative have discovered a number of desirable or maybe required usability enhancements like: secure access to data at the source, user interface capabilities like spell check, auto update, cut and paste, and report generation. Finally, users want to be known by the system and only have to log in one time to complete their workload. Identity and access management is currently handle by the system or application entry point.

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3.3 Business Current State Findings and Recommendations

The table below summarizes the major findings and recommendations RSI discovered during the Current State Assessment:

Systems Environment		
	Findings	Recommendations
SE-1	The Agency Core Tax System is made up of 12 systems/applications that are supported by dozens of applications, Access DBs and Excel spreadsheets. Many of the functions provided are redundant, and costs savings can occur by reducing the number of systems/applications, which will in turn reduce system maintenance, training and coordination.	Examine and assess the functionality of Integrated Tax Systems (ITS) solutions currently in the marketplace. The marketplace has developed best practice systems over the past 15-20 years, and the Agency can benefit from these innovations.
SE-2	IS and the business users have been creative in their ability to leverage system functionality and technology to cover tax administration needs, but there's a strong reliance on the business users to make the system work via moving between many screens, subsystems, Access DBs, Excel spreadsheets, system macros, as well as manually moving documents across network locations to be imaged.	A new Core Tax System Replacement would minimize the need for users to develop gap solutions or workarounds via Access DBs, Excel spreadsheets, and Macros that aren't supported by IS. A new Core Tax System Replacement would provide end to end support and remove situations where users circumvent the system to meet their business needs. When exploring options for a new Core Tax System Replacement the Agency should learn from industry best practices. There should be a conscious effort to move away from driving future process design and requirements based on the current workaround-influenced environment.

	User Experience and Training	
	Findings	Recommendations
UE-1	Users work across multiple systems to research and work their accounts. These systems include, but are not limited to; Business Registration Management System (BRMS), Excise Tax (ET), Taxpayer	remove the need for users to access multiple systems to research an account. There should be
	Accounts Receivable Integrated System (TARIS), Credit Management System (CRMS), Outstanding Return System (OSR), Automated Compliance System (ACS), Secure Messaging, Integrated Document System (IDOCS), Electronic Case Management System (ECMS), Reseller Permit Administration System (RSP), Audit	accounting, case notes, and correspondence.

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	Review System (ARS), Network Locations, Secure FTP, Macros (IS supported and not IS	
	supported), E-file, Help Desk, and Business	
	Licensing Service (BLS) System. Different	
	databases (BLS, ECMS, and ARS) and	
	different information for the same taxpayer	
	result in inconsistent data.	
UE-2	The technology doesn't provide simple	A new Core Tax System Replacement would
	functionality that users are accustomed to	provide an improved end user experience with
	when working with applications outside	the functionality that is available and expected
	DOR. For instance, word-wrap or spell-check	with today's technology.
	is not available on the TANDEM system.	
	Users are required to use the function keys to	
	navigate screens and take action.	
UE-3	The current user experience requires users to	A new Core Tax System Replacement would
	access multiple work queues and/or tickler	provide the user with a consolidated view of the
	work-lists in TANDEM, IDOCS, and ECMS,	taxpayer, related case notes, and a simplified
	as well as spreadsheets outside the system	work-list or work queue.
	(this is the exception). Notes are stored in	
	multiple locations within systems and across	
	systems. There are multiple locations to view	
	notes on TANDEM. Another location for	
	notes is in ECMS, and the Help Desk has its	
	own notes location for processes like E-file.	
UE-4	There are also times when the user is waiting	A new Core Tax System Replacement would
	on information to move from one subsystem	minimize the wait time users currently
	to another overnight. This waiting period	experience when waiting for data to move from
	delays the time it takes for the user to get	one sub-system to another or waiting for a
	their job done.	screen to pull back results from a query.
UE-5	It can take 9 months to train someone on the	A new Core Tax System Replacement would
	business side to learn how to use the	decrease the amount of time it takes for a user
	TANDEM subsystems, supporting systems,	to learn the system, provide online help for
	and Excel workbooks.	users and remove having to teach users
		workarounds and how to manage content
		outside of the Core Tax System.

	Supporting System Changes		
	Findings	Recommendations	
SC-1	System changes (e.g., legislative changes or enhancements) are extremely time consuming and difficult to test. They are difficult to test because of the design of the systems, lack of support for automated unit testing, etc. There	A new Core Tax System Replacement should provide a solution that allows for legislative changes to be made in one location and to ensure that testing in a test environment produces the highest confidence levels prior to	
	have been so many direct production fixes over the years that it's difficult to replicate those changes in a test environment to ensure that the change will work in production.	going into production with that legislative change.	

Taxpayer Accounting

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	Findings	Recommendations
TA-1	Taxpayer accounting exists across multiple systems (ET, TARIS, and CRMS) and causes issues when trying to quickly understand the balance or to manually back out penalties. Part of the problem with the existing systems is that there is no concept of an account balance. All balancing is done based on individual documents, not accounts.	A new ITS would provide for improved taxpayer accounting capabilities.
TA-2	Outside of a few exceptions, all "out of balance" returns are manually worked and most payments, as well as credits, are applied manually.	A Core Tax System Replacement should reduce the number of manual steps needed to process a return and apply a credit or a payment.
TA-3	There are limitations around taxpayer accounting, account reconciliation, and showing the history of an account, how payments were applied, and history of calculated values.	A Core Tax System Replacement should provide a detailed account history online with the ability to print that account history for the taxpayer that shows a simple and concise accounting of all financial activity on that account.
TA-4	To transfer a payment the user must manually create a credit on CRMS, apply it to the correct period, and reopen the period where the payment was misapplied.	A Core Tax System Replacement should reduce the number of steps needed to perform a payment transfer.
TA-5	Creating a Trust Fund Assessments (TFA) for a Responsible Officer of a business is performed outside of the system using an Excel workbook.	A Core Tax System Replacement should provide automation when determining a TFA.
TA-6	If a new fee or tax does not follow RCW Chapter 82.32 then the system cannot processing that fee because it is not tax.	A Core Tax System Replacement should provide the ability to easily configure and implement fees.
TA-7	In the past, the State Auditor's Office has asked for DOR to provide traceability of data from AFRS back to the source which was difficult to provide with the current system.	A Core Tax System Replacement should provide detailed traceability, always, down to the financial transaction level and follow generally accepted accounting principles. There should be no need for data fixes by IS.

	Case Management		
	Findings	Recommendations	
CM-1	Case management occurs across many systems. Some case management occurs outside of the system. There are no common platform, consistency, or efficiency gains, by supporting case management in several locations.	A Core Tax System Replacement would provide one case management module that can be configured to support all of the Agency's case management needs.	
CM-2	Compliance efforts, discovery, collections and audit, are hindered due to the significant amount of manual processing required.	The Agency could benefit significantly from automated workflow with tighter integration of the compliance functionality components; selection, case management and field audit, and	

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tighter integration with taxpayer accounting.	
The Agency should examine industry-leading compliance tools to improve automation in this area.	

	Correspondence Management	
	Findings	Recommendations
CR-1	Correspondence is not consistent throughout the Core Tax System as there are a number of ways that users can access, generate, and store correspondence.	A new Core Tax System Replacement would provide a consolidated Correspondence Management Solution across all aspects of Tax Administration.
CR-2	There are correspondence applications for ACS and warrants that allow users to select from dropdown lists, but other correspondence is managed outside of the system with templates stored on shared drives and users are required to move correspondence to network locations to be imaged.	All correspondence should be created, maintained, accessed, stored, and viewed in a consistent manner.
CR-3	Other correspondence is created through a batch process and mailed by Department of Enterprise Services (DES).	All correspondence should be created, printed, mailed, maintained, accessed, stored, and viewed in a consistent manner.
CR-4	IDOCS is the central location for correspondence to be stored; however, not all correspondence is imaged. Some physical case folders with correspondence are imaged upon case closure so the documents can be scanned together.	All correspondence should be stored and viewed in a consistent manner.

	Business Rules Management		
	Findings	Recommendations	
BR-1	Business rules are not centralized. Business rules are located in the code across various systems and create interdependencies across systems.	A new Core Tax System Replacement would provide a consolidated Business Rules Management Solution across all aspects of Tax Administration.	
BR-2	Business rules are complex because there are so many exceptions in tax law that system changes can't be automated. An example is local tax and all of the exceptions for processing and distributing rules for the tax given the sensitive nature of	Complexity in a business rule should not limit the ability to automate. All business rules should be created, maintained, accessed, stored, and viewed in a consistent manner.	

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tions if something were to go
A new Core Tax System Replacement would provide a Business Rules Management Solution that allows the conditions of every rule to include the time frame that the rule is in effect. The Business Rules Management Solution that allows the conditions of every rule to include the time frame that the rule is in effect. The Business Rules Management Solution should include a change management feature for introducing and testing business rule adjustments
ore Tax System. for introducing adjustments.

	Workflow Mar	nagement
	Findings	Recommendations
WM-1		A Core Tax System Replacement should consolidate workflow across all areas of the business process creating greater consistency and efficiency gains.
	Whether returns, approvals, audit cases, compliance cases, or IDOCS documents, each system has their own set of workflow rules that need to be maintained separately.	

	Reporti	ng
	Findings	Recommendations
R-1	Reporting is inconsistent in the creation,	An enterprise wide business intelligence
	storage, delivery, and format across systems.	solution should be implemented to provide
		consistency throughout the organization.
R-2	Reports can be system generated or generated	An enterprise wide business intelligence
	by users typing into Excel workbooks.	solution should be implemented to provide
		consistency throughout the organization.
R-3	Agency reports management has evolved	A Core Tax System Replacement would start
	over many years and an assessment of what's	with an assessment of all reports to determine
	needed vs. what's not needed needs to be	what's needed.
	performed.	

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3.4 Technical Current State Findings and Recommendations

The table below summarizes the major findings and recommendations RSI discovered during the Technical Current State Assessment:

	Functional Do	ocumentation
#	Findings	Recommendations
FD-1	No comprehensive system-by-system set	
	of business rules required to ensure	discover, manage and even centralize business
	effective support of business	rules.
FD-2	processes/functions.	At the Core of the modernment the relation desired
FD-Z	No pre-existing system interface or context diagrams. (These diagrams were created as	At the time of the replacement, the solution should be documented in a tool that can be maintained by
	a by-product of this system analysis and	DOR IS Staff.
	assessment.)	DON IS Stall.
FD-3	Although some data dictionaries and	At a minimum, create and maintain an Agency
	logical models exist for some systems,	Data Management Strategy, conceptual data model
	there is no comprehensive set for all	and logical data models. Other supporting data
	systems.	artifacts that would prove beneficial include:
		Semantic Model, Fact Model and/or Enterprise
	No conceptual or semantic models exist.	Data dictionary.
	No Access Data Managament Chapters	
	No Agency Data Management Strategy exists.	
FD-4	Minimal to no evidence of enterprise IT/IS	Establish standards and track/monitor compliance.
1.0-4	standards applied to activities such as: data	Create a governance mechanism that will guide the
	modeling, software development, testing,	Agency through the process of standards
	etc.	alignment.

	Business	s Needs
	Findings	Recommendations
BN-1	Current system complexity prevents effective and efficient IS changes in support of legislative, process, or business changes.	Adopt, purchase or build an integrated tax solution that includes configurable features, policy & rules management, and workflow.
BN-2	Change impact analysis is difficult or nearly impossible due to the undocumented system, data and business interdependencies.	As part of a Core Tax System Replacement, implement strict policy around documenting systems, data flows, and business interdependencies.
BN-3	Change impact analysis is further complicated by the number of systems and system owners that use the same or similar data from varied sources.	As part of a Core Tax System Replacement, consolidate information and processes, and limit the number of systems where possible.
BN-4	No documentation of assessed impact to business processes when system changes or maintenance activities are performed.	As part of a Core Tax System Replacement, provide documentation prior to system changes that describe the impact to the business processes as a result of the system changes or maintenance.
BN-5	Overall system performance, effectiveness, and efficiency cannot be (or is not) accurately measured.	Determine Key Performance Indicators that are easily measureable and develop a tracking system. Include requirements to track these KPI's in any

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b	uild	or	buy	projects	as	part	of	the	Core	Tax
re	eplac	em	ent e	ffort.						

	Development Proce	ocess and Resources				
	Findings	Recommendations				
DP-1	Inconsistent development practices	Leverage the STAR Technical Steering				
	performed using non-standard tools across	Committee to identify and systematically adopt				
DD 4	various platforms.	development standards.				
DP-2	Undocumented development process/methods vary from system to	Create training programs for developers that focus on DOR development standards. Provide				
	system.	recognition for improvement in the development				
	system.	process and methodology.				
DP-3	Major system/application upgrades or	A Core Tax System Replacement should be				
	modernization efforts rarely occur due to	designed to allow for planed/scheduled major				
	the amount of effort and number of	system/application enhancements to occur with				
	resources required to maintain the existing	minimal impact to ongoing operations.				
	systems.					
DP-4	System updates are limited to tactical fixes,	To create system performance improvements				
	legislative requirements, or simple enhancements.	begin to build new functionality into enterprise				
	ennancements.	services starting at the data layer and moving to the business rules level.				
DP-5	Resource pool is not optimized. The	Include staffing, training and team development				
DI 3	Agency does not have the appropriate	as part of the Core Tax System Replacement				
	number of trained/skilled IS staff to	effort to support further and future development,				
	accommodate the number of enhancements	replacement system maintenance, and expansion				
	requested. In addition, resources do not	of new technologies.				
	exist for large scale modernizations,					
	development efforts or replacement					
DP-6	projects. IT/IS professionals willing and able to	Intentionally reduce the dependency on Legacy				
DP-0	develop and manage DOR Legacy system	systems over a planned time frame.				
	are limited and decreasing.	systems over a planned time frame.				
	are mined and decreasing.					
	New IT/IS professionals are not acquiring					
	legacy system skills in the current DOR					
	technical environment.					
DP-7	Development tools and environment are not	Consider moving to platforms with more				
	robust and in some cases do not maximize	accessible development, management and testing				
	efficiencies given the current available technologies.	suites. Create development, test and production environments wherever possible.				
	teennologies.	environments wherever possible.				

	Technology						
	Findings	Recommendations					
TC-1	Non-standard scanning equipment. Multiple	Select an Agency standard imaging platform					
	types of scanners that utilize a variety of	suitable for All DOR functions/programs (e.g.,					
	scanning, OCR, and content management	BLS, Registration, Tax, etc.)					
	technology.						

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TC-2	Multiple .Net versions (1.0, 1.1, 2.0, 3.5,	Migrate all applications to a current version. If			
	and 4.0) are supported.	applications cannot move to the newer version			
		twilight the application and build or buy			
		replacement solutions.			
TC-3	Large variety of coding languages used	Restrict new development to a set of standard			
	(counted 12 languages).	supported language. Create requirements around			
		those languages for future development or			
		procurement projects.			
TC-4	Due to different platforms being used, there	Leverage the STAR Technical Steering			
	are two development environments, source	Committee to adopt and implement development			
	control tools, and development tools.	standards for source code, version control and			
	_	development environment.			
TC-5	Multiple versions of Microsoft Office	Replace the dependency on complex Excel and			
	applications (e.g., Excel, Access, etc.) are	Access application with a Core Tax System			
	used to support business needs.	Replacement. As functionality becomes available,			
		decommission older versions.			

	Information	n Services				
	Findings	Recommendations				
IS-1	Business areas are aware of the technical limitations and are overcoming or creating workarounds to compensate for these limitations.	Adopt, build or procure a Core Tax System Replacement that is configurable for new or legislated functionality. Create a process for enhancement planning, development, and release management.				
IS-2	Data processing and business analytics are accomplished outside IS provided solutions.	Integrate necessary Business Intelligence into the Core Tax System Replacement solution.				
IS-3	Access databases are utilized to ensure data integrity of information used to execute routine business activities. Business area specific Access DBs are maintained as the primary repository of a significant amount of data used to track work progress and to provide decision analytics.	and accessibility as part of the Core Tax System Replacement efforts.				
IS-4	Excel spreadsheets are used to calculate taxes, verify credit and to facilitate other key business functions. Data in these spreadsheets are entered primarily manually; but, may also be exported from various IS systems.	Include business driven requirements for features currently delivered by Excel spreadsheets in the new design or procurement documents for the Core Tax System Replacement efforts.				
IS-5	A wide variety of undocumented macros have been adopted to aide system users by recording the steps and screens used to complete routine work, ensure run accuracy, perform audit functions, and other tasks.	Gather all currently used macros and determine the purpose and function of each macro. Develop associated requirement as needed to include in future development or procurement efforts.				
IS-6	Business rules, analytical logic, and reporting procedures used in the Excel spreadsheets and Access databases are not documented.	Capture all business requirements associated with Microsoft application so that the appropriate requirements are developed for the Core Tax System Replacement efforts.				

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IS-7	IS system owners are not aware of the wide	Work with business areas to determine, document				
	variety of information services and business	and track the rules and requirements associated				
	support workarounds currently in place.	with current business processes.				

	Business Continuity								
	Findings	Recommendations							
BC-1	The criticality of existing systems, subsystems, and applications to the organization's mission (purpose) is not defined and documented.	Service Recover Plan and supporting documentation should be updated to reflect the significant effort required to resume business due largely to the fact that business data and business process resides outside the Core Tax Systems.							
BC-2	Information security and business operational risks are not effectively used for strategic IS planning and investments.	Develop a risk management and mitigation strategy that supports enterprise governance and strategic planning.							
BC-3	System (outage and down time) risk assessments have not been performed for all systems. Only three (Forest Tax, Unclaimed Property, and Appeals Case Management System) claim to have performed a risk assessment.	Define and document a System Risk Assessment. Reference: Special Publication 800-30, Risk Management Guide for Information Technology Systems.							
BC-4	Further research is required to complete and maintain an enterprise wide IS/IT risk assessment.	Adopt and build in a risk assessment process into the lifecycle of new or replacement systems.							
BC-5	No prior experience with system renewals and organizational transformation.	Consider including training or specific transformation processes to increase strategic skill sets.							
BC-6	System effectiveness and efficiency needs are not traced to the organization's business vision, mission, and goals.	Create a clear Enterprise Architecture program that can operate from, track and achieve agency vision, missions, and goals according to agency standards, principles and policies.							
BC-7	Established business vision oriented principles are not used when making IS change decisions.								

	Data Efficiency, Secu	ırity and Usability			
	Findings	Recommendations			
DE-1	Data sharing methods are outdated and may present an information security risk:	Develop a Data Management strategy that sets enterprise goals including but not limited to data ownership, quality, standards, warehousing,			
	-Limited data security standards are applied to data exchange at rest or in transit.	Business Intelligence,			
	-Limited data integrity and quality standards have been implemented throughout the data lifecycle.	Create secure methods of data access, viewing, and logging.			
	-Data movement in the department goes beyond the scope of data security standards				

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DE-2 Web development standards (style sheets, templates, etc.) have been initiated; but establish web development standards across		(i.e., reports, CSV, Excel, Access, etc.).	
have not been implemented across all applications applications.	DE-2	templates, etc.) have been initiated; but have not been implemented across all	establish web development standards across all

These findings and recommendations serve as the basis for many of the Future Vision gaps that will be discussed further in the remaining project deliverables. Accordingly, our focus on the Current State Assessment findings and recommendations was on technology issues and these findings and recommendations, to the extent they have not been implemented to date will serve as an input to the Future Vision, High-Level Requirements, Alternatives Analysis, and Implementation Roadmap.

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4. Core Tax System Overview

The Core Tax System is made up of the 12 systems described below. Over the past 15 years the Core Tax System has evolved to meet RCW 82.32 tax laws, support additional tax types, deliver legislative changes, and automate manual business processes. Because of this, the Core Tax System has developed dependencies across subsystems resulting in less than desired tax return processing and tax accounting capabilities. In addition, the Core Tax System represent a mix of technologies and, in many cases, each has their own business rules, workflow, correspondence, case management, and reporting capabilities. Below is a brief description of each system.

4.1 Core Tax System Descriptions (12 Systems)

- 1. <u>Business Registration Management System (BRMS):</u> This system manages business registrations. When a business establishes itself as a legal entity, a business registration application is filed. The business registration information is captured in BRMS and details such as filing frequency, tax codes, and North American Industry Classification System (NAICS) codes are added.
- Excise Tax (ET): This system contains data from all filed excise tax returns, down to the tax return level detail, and supports all funding to the general and dedicated funds by Revenue Accounting.
- 3. <u>Outstanding Returns File (OSR):</u> This system tracks each tax return, based on the taxpayer's filing frequency, as outstanding until the return is filed or otherwise cleared.
- 4. <u>Taxpayer Accounts Receivable Integrated System (TARIS):</u> This system manages taxpayer receivables by assessing tax liabilities, penalties, interest and accounting for payments until paid in full or written off as uncollectible.
- 5. <u>Credit Management System (CRMS):</u> This system manages taxpayer refunds, credits, and special credits.
- 6. <u>Automated Compliance System (ACS):</u> This system allows Revenue Agents to manage items referred for collection by tracking TARIS invoices and outstanding returns from the OSR system.
- 7. <u>Integrated Document System (IDOCS):</u> This system is the agency-wide imaging system. All tax returns and correspondence coming into DOR are captured here and are available to most users.
- 8. <u>Electronic Filing System (E-file):</u> This system allows taxpayers to file tax returns electronically and includes upfront validation rules to decrease the number of tax returns with errors.
- 9. <u>Electronic Case Management System (ECMS):</u> The system is used by Tax Discovery agents to identify and track non-registered businesses. Once registered the ECMS case is linked to the Unified Business Identifier (UBI) number on BRMS. When an invoice is generated the ECMS case is linked to the invoice on TARIS.
- 10. <u>Audit Review System (ARS):</u> This system is used to issue tax assessments from Audit, TAA, Compliance, and Special Programs. This system handles the final review for a credit or debit assessment. Once created the taxpayer is billed or refunded.
- 11. <u>Electronic Partial Payment Agreement (EPPA)</u>: This system allows a Revenue Agent to enter into a partial payment agreement with a taxpayer to automatically debit their bank account regularly to pay off a tax warrant.

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12. <u>Transcript System (Field Audit):</u> This system allows Audit to assign an audit number to a taxpayers account and assign the audit to an Auditor.

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Table 4-1: Core Tax System Matrix

	Table 4-1: Core Tax System Matrix											
	BRMS	ET	TARIS	CRMS	ACS	OSR	E-file/Help Desk	ECMS	IDOCS	ARS	EPPA	Transcript (Field Audit)
Inputs	BLS (BLA, ARD), Discovery case	Paper and Electronic Returns	Returns with balances or credits	Return, Established Credit, ARS, Misc Tax Credit, Paper check, EFT, Refunds, Special Credits, Cash Bond	Past due returns and receivable invoices	Past due return	Electronic Return, Secure Messages, Special Credit Application, Apportionable Income Application, Penalty Waiver, IVR	User inititated	Paper and electronic returns, remittance documents, and correspondence	User initiated by account information (UBI)	Taxpayer request	Account that has been selected for audit
Outputs	Taxpayer account data (e.g., name, DBA, UBI, Filing Frequency, etc)	Return processed	Invoice	Establish and Issue Credits, Refunds to TP, Payments posted	Demand letters, warrants, payment plans, NOWD	Notice to taxpayer, referral to ACS	Electronic Notices to TP, Return filed, Secure Messages	Taxpayer case with Case ID	Indexed images	Tax Assessments	Payment plan agreement	Data populated to conduct audit
Primary User Groups	TAA, Compliance, Audit, TPS, SP	TAA, Compliance, Audit, CM, Rev Acct	TAA, Compliance, Audit, SP, RA	TAA, Compliance, Audit, CM, Rev Acct, SP	Compliance, SP	TAA, Compliance	TAA, Compliance, IS, TPS	Audit, Compliance, TAA	All Divisions	Audit, Compliance, TAA, SP	Compliance	Audit, TAA, Compliance?
Technology	COBOL/#COBOL, #SCOBOL, #DORCL	COBOL, #SCOBOL, #DIRCL, JCL	.NET 1.1, #.NET 1.0 ,#.NET 2.0, #.NET 3.5, COBOL	.NET 3.5, COBOL	COBOL, #SCOBOL, #DORCL	COBOL, #SCOBOL, #DORCL	.NET 3.5	.NET 3.5	Impression Technology	#COBOL, VB6	TARIS Sub-system	COBOL, #SCOBOL, #DORCL, C#
# of Interface Depdencies	18	17	16	29	6	8		4		3	3	4
Work Around/Shadow Systems	US Census, NAICS Iookup	Access DB, Excel Worksheets, A8 worksheet, Scanner	Access DB, Excel Worksheets, CRRS, BCS, EPMS	Excel worksheets for Special Credits	Accurint, PACER, Bankruptcy Courts, Outlook, Excel SS, Word Templates			Data Warehouse, Access DBs, Excel SS	Paper Files	TATS, Audit 2000, MARIO,		Excel workbook
System Stability	High	Low	High	Medium	Low	High	Medium	High	High	High	High	Low
System Confidence Level	High	Low	High	Medium	Medium	Medium	Medium	Medium	High	High	Medium	Medium
Resource Confidence Level	Medium	Low	High	High	Medium	High	Medium	High	High	Medium	High	Medium
Complexity Level	High	High	High	High	Medium	Low	Medium	Medium	Medium	Low	Low	Low
Level of Effort to Support (# resources and level)	1 ITS5 1 ITS4 1 ITS3	1 ITS5 1 ITS4 1 ITS3	1 ITS5 1 ITS3	1 ITS5	2 ITS5		2 ITS5 1 ITS4 1 ITS3	1 ITS4	1 ITS5	1 ITS4	1 ITS5	1 ITS3
Exposure to Change	1 to 4	1 to 4	3	1	1.5	0.5	1 to 4	1		1	1	0
Owner	TAA	TAA	TAA	TAA	Compliance	Compliance	TAA	Compliance	TAA	Audit	Compliance	Audit
Data Redundancy/Data Models	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Existing Documentation User Guide/Data Models	Low	Medium	Medium	Medium	Low	Low	Low	Low	Low	Low	Low	Low
Supporting Systems	BLS, MLS	BCS, CRRS, AFRS, TM\$, EPMS, RSP, RVP, RRS, CRRS,	BRMS, CRMS, ET, OSR, IDOCS	ACH, Bank of America, TM\$	CRMS, TARIS, OSR, BRMS, ICT, E- Withhold, Web- Withhold	ET, TARIS, BRMS	BRMS, ET, TARIS, CRMS, OSR	BRMS	Impression Technology	Audit 2000, MARIO, Time Distribution, TATS, ET, TARIS, CRMS	ET, TARIS	Audit 2000, MARIO, Time Distribution, TATS, ET, TARIS, CRMS
Age of System (years)	23	20	18	16			14		10	12	added to TARIS	

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4.2 Tax Processing Overview

Table 4-2: Tax Types and Supporting Systems

	BRMS	ET	TARIS	CRMS	OSR	ACS	Trans. (FD)	ECMS	E-File	IDOCS	ARS	EPPA
Mainstream												
B&O Tax	Χ	Χ	Х	X	N/A	N/A	Χ	N/A	Χ	N/A	Χ	N/A
Retail Sales (state & local)	X	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Use Tax (Business)	Х	Х	Х	Х	N/A	N/A	Х	N/A	Χ	N/A	Х	N/A
Consumer Use Tax	Χ	Х	Х	Х		Х		N/A		N/A		N/A
Public Utility Taxes	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Lodging Taxes	Х	Х	Х	Х	N/A	N/A	Х	N/A	Χ	N/A	Х	N/A
Rental Car					N/A	N/A		N/A		N/A		N/A
Brokered Natural Gas	X	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Leaded Racing Fuel	Х	Х	Х	Х	N/A	N/A	Х	N/A	Χ	N/A	Х	N/A
Tobacco Products / Cigar	X	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Litter Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
E-911 Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Fish Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Hazardous Substance Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Intermediate Care Facilities Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Litter Tax	Χ	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Moist Snuff	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Cigar Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Motor Vehicle Sales/Leases	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Petroleum Products	Х	Х	Х	Х	N/A	N/A	Х	N/A	Χ	N/A	Х	N/A

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	BRMS	ET	TARIS	CRMS	OSR	ACS	Trans. (FD)	ECMS	E-File	IDOCS	ARS	EPPA
Tax												
Refuse Collection Tax	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	N/A	Х	N/A
Solid Fuel Burning Devise Fee	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	X	Х	N/A
Spirit Taxes	Х	Х	Х	Х	N/A	N/A	Х	N/A	Х	Χ	X	N/A
Syrup Tax	Χ	Х	Х	Х	N/A	N/A	Х	N/A	X	Χ	X	N/A
Tire Fee	Χ	Х	Х	Х	N/A	N/A	Х	N/A	X	Χ	Х	N/A
Oil Spill	Χ							N/A		Χ		N/A
Non-Mainstream												
Aircraft	Χ		Х	X	N/A	N/A		N/A		Χ	N/A	N/A
Cigarette Tax	Χ		Х	Х	N/A	N/A		N/A		Χ	N/A	N/A
Estate	Χ		Х	Х	N/A	N/A		N/A		Χ	N/A	N/A
Leasehold	Χ		Х	X	N/A	N/A		N/A		Χ	N/A	N/A
Motor Vehicle Excise Tax	Х		Х	Х	N/A	N/A		N/A		Х	N/A	N/A
Real Estate Excise Tax	Х		Х	Х	N/A	N/A		N/A		X	N/A	N/A
Escheats					N/A	N/A		N/A		Χ	N/A	N/A
Forest Tax (Timber)	Χ		Х	Х	N/A	N/A		N/A		Χ	N/A	N/A
Watercraft Tax	Χ		Х	Х	N/A	N/A		N/A		Χ	N/A	N/A
Vessel Tax	Х		Х	Х	N/A	N/A		N/A		Х	N/A	N/A
Trailer Tax	Χ		Х	Х	N/A	N/A		N/A		Χ	N/A	N/A
Mobile Home Fee					N/A	N/A		N/A		Χ	N/A	N/A

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4.2.1 Core Tax Flow

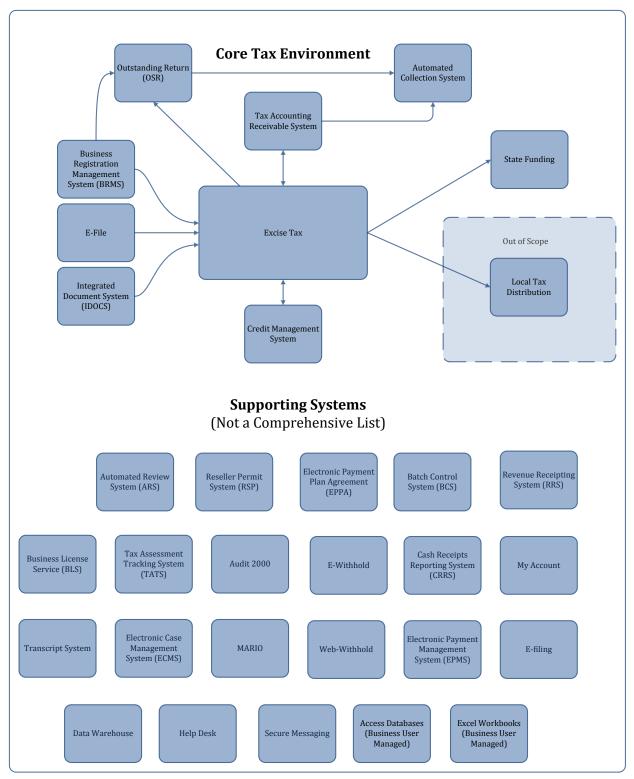


Figure 4-1: Core Process Flow

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The list below represents the general flow of information through the Core Tax System (note that not all 12 systems are listed as they support the exception flow or other business needs).

- 1. Businesses fill out their Business License Application (BLA) and submit it to the BLS
- 2. BLS then sends the registration information to BRMS and ARDs are created for users to complete the registration process.
- 3. An OSR is established for each tax return due, based on the taxpayer's filing frequency.
- 4. Taxpayers file their tax returns using the E-file system or paper.
- 5. Paper and electronic tax returns are then imaged in IDOCs.
- 6. IDOCs creates an output file and sends the tax return and payment information to ET.
- 7. The filed tax return will clear the OSR.
- 8. OSR for unfiled tax returns will be referred to ACS to be worked by a Revenue Agent.
- 9. Tax returns and payments are processed and posted into the ET system.
- 10. Overpayments are sent to CRMS for a credit to be issued or established.
- 11. Credits may be posted against future liability or refunded to the taxpayer.
- 12. If there is an underpayment, a balance due is sent to TARIS.
- 13. From TARIS, invoices are sent to the taxpayer. If after 30 days the invoice is unpaid, it is referred to ACS and worked by a Revenue Agent.

4.2.2 Examples of Core System Limitations

GENERAL SYSTEM CHALLENGES

Batch processing in the system holds up work and the user must suspend the work until the action has been performed in the system overnight (e.g., funding, balance dues, and credit notices).

Technology is older and pieced together making it difficult for staff to grasp the system relationships.

The system is not flexible enough to handle legislative changes. The system was not created to accommodate fees. This results in work around actions or non-primal actions in other areas of the systems to process what it's not meant to process.

Manual adjustments are required because the adjustments are not integrated between systems.

System users must use many screens to perform their work. The system does not have user friendly screens.

The system transaction history/audit trail is not easily understood from the system. Multiple screens and systems require the user to piece together the history of the account.

Several keystrokes or function keys are needed to make the system complete an update.

Calculation of interest is not automated throughout the systems.

Notes are in multiple systems and the automated system notes are cryptic and do not give enough information for users to determine reasons for the actions.

Letters must be manually generated.

Manual account reconciliations require reviewing all Core Tax systems to determine what has occurred

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on an account. There isn't an easy way to show the taxpayer what has occurred on their account for one specific or multiple period(s).

Business rules are embedded throughout programs across the Core Tax System.

When any system goes down the other systems must be frozen so that transactions can be recreated in the system that is down (e.g., ACS).

IDOCS CHALLENGES

Letters are generated through templates residing on the network. They are also kept in paper folders (annual reports, application, letters, because it makes the process easier as IDOCS doesn't group).

Individual letters must be manually imported into IDOCs.

The indexing of documents could be improved to provide better subgroupings of documents. For example, credit certificate number is not identified through the images for that taxpayer until they find the right document.

When sending a secure message, users have to save the message separately as a PDF file and save to a network drive so that it can be imported into IDOCS.

BRMS CHALLENGES

Business account information is duplicated between BLS and BRMS systems and the only common identifier to link accounts across system is the UBI #. One UBI can have multiple accounts and locations.

Both systems use different numbering schemes for sub accounts and locations so automating updates between systems is not possible.

Taxpayer account updates are not automatically shared between systems or outside agencies.

Accounts opened without an ARD are not setup up with BLS and UBI agencies.

The address provided by the taxpayer has to be manually verified against the USPS website to determine if it is a valid address.

The current program that assigns a local sales tax code for a business location is not as accurate as using the GIS address look-up tool.

Duplicate accounts can be created if the system doesn't exactly match the name of the business and the Federal Employer Identification Number (FEIN) or the Social Security Number. The result is manual work to close one account and determine which one should be closed.

BLS and BRMS systems do not have a search capability by Social Security Number (SSN) or FEIN.

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E-FILE CHALLENGES

Taxpayer confusion around payment due dates after the tax return is filed - unsure if payment was submitted timely.

Credit programs caps are not fully integrated into the E-file system.

Business rules are not consistent between E-file and ET (e.g., negative gross calculation for service SBC credit).

System is aging with tons of code additions, making it difficult to maintain.

No effective recovery program, potential to lose data (e.g., lost E-file tax returns and had to recreate them all manually).

Users have the inability to JV E-file tax returns.

ET CHALLENGES

State and local tax funding.

DOR does not have the ability to reverse front funding when a payment goes NSF. The system allows calculation of taxes on incorrect tax types (e.g., Small Business Credits for Public Works).

Decimal place limitations.

Character limitations.

Tax returns that Error Out of Balance (EOB) when they shouldn't and tax returns that don't EOB when they should.

Several keystrokes or function keys are needed to make the system complete an update.

System users must use many screens to perform their work. The system does not have user friendly screens.

Cannot have more than one OSR for a period in ET (Streamline Sales Tax (SST) Example).

OSRs are deleted for an audit period but if the audit is cancelled or audit period is changed, the OSRs are not re-established.

When extending a tax return due date in OSR, once the tax return is filed the history of the extension is not retained in ET. Penalties are then assessed incorrectly.

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TARIS CHALLENGES

TARIS does not split out Sales Tax and B&O Tax making it difficult to determine how payments were applied. Financial transactions are comingled across tax types making it difficult to determine what happened on an account.

TFAs are manually intensive and performed outside of the system via an Excel workbook – with the results of that workbook being put into the system.

The write-off process is time consuming and almost completely manual, taking a manager at least 40 work hours to complete. The system is unable to determine items that are truly past statute or where taxpayers are in long term payment arrangements.

Manual adjustment is required because the adjustments don't feed from ET to TARIS or vice versa.

Liquor taxes are an exception to the pay down rule and have not been automated. They are paid last after all other taxes.

CRMS CHALLENGES

Most credits must be applied manually.

Access DBs and Excel spreadsheets are used to manually track special credits.

Overnight process for issued credit notices and refunds.

No breakout of the tax detail.

The system isn't flexible enough to handle specific credits created by the legislature.

Refund process requires manual work, multiple screens, and multiple steps.

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5. Business Processes

5.1 Taxpayer Accounting Administration (TAA) Core Tax Functions

Core functions of TAA include reconciliation of taxpayer accounts, business registration, taxpayer account maintenance, data capture, document imaging, and retention of taxpayer records. Within the division, Excise Tax Examiners conduct tax return and tax account examinations, reconcile taxpayer account activity, and bill for tax underpayments or refund tax overpayments.

5.1.1 Error and Out of Balance (EOB) Returns

Sources for this process are as follows:

• Paper or Electronic Returns

Examiners work is driven from multiple work queues. Their primary work is the EOB. The mainstream process is for Examiners to work all out of balance tax returns processed. There is an EOB hierarchy of system validation edits to determine if the tax return will become an EOB. Once assigned to an Examiner, they own that work item and all related issues to that work item.

Some taxpayer accounts could have multiple errors and will have multiple work items. The Examiner must correct all errors on the accounts and close out other work items if necessary. If more than one Examiner selects work items for the same taxpayer account they must work together to not duplicate work and manage the account effectively.

The outputs for this process are as follows:

- Issue balance due
- Issue credit/refunds
- No difference in account or zero outcome

EOB CHALLENGES

State and local tax funding is complex and varies depending on the status of the tax return, invoice types or tax types (e.g., Front funding on unpaid tax returns with dedicated state funds).

When extending a tax return due date in the OSR, once the tax return is filed the history of the extension is not retained in ET. Penalties are then assessed incorrectly.

Tax returns that EOB when they shouldn't and tax returns that don't EOB when they should.

When a tax return has multiple errors involved, the hierarchy in the system determines which queue it will land in. The user must research the account to determine all of the errors that need to be resolved.

When transferring an EOB to another user, only one item can be transferred at a time.

If another examiner is working an EOB, the account must be unlocked to transfer to another user.

Split rates for annual tax returns require manual intervention if the location code changes. The system only uses the most current location code. The user must manually adjust using effective dates.

Split B&O does not calculate in the system if there are changes to the account and must also be manually

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corrected. The new system should allow users (management) the ability to select the queues for EOB's to fall into at any time.

Sorting of work queues is not available in the system. The user is only able to view the received date. This causes issues when users are trying to meet productivity goals and cannot see the items that are high priority or that will resolve back logged items.

Performance measure calculation is incorrect when trying to determine when an account is adjusted. System is capturing the original received date. Performance measures need to know the action date.

5.1.2 Amended Returns

Amended tax returns are initiated in the following manner:

- Secure Messaging
- Paper requests from the taxpayer or through the field staff (can be paper, fax or scanned)
- EOB actions
- Attached to an invoice payment from the taxpayer

Taxpayers can amend their tax returns through "My Account" or by submitting paper documents. The IDOCs work queues include amended tax returns and are worked by TAA Examiners. These are worked similarly to the EOB process, as the account must be examined holistically and errors corrected.

The outputs for this process are as follows:

- Issue balance due
- Issue credit/refunds
- No difference in account or zero outcome
- Corrected Notice of Balance Due correspondence

CHALLENGES

Amended tax returns must be manually adjusted.

Manually adjusting across multiple systems.

Multiple workflows cause duplication or splitting of work.

Split rates can cause problems with amended tax returns and can be a problem for multiple years.

5.1.3 Refunds

Refunds can be requested or generated in the following manner:

- Secure messaging
- Paper request
- Adjustment of closing agreements
- Settlements
- EOB overpayment
- Amended tax returns

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- Credit Program (e.g., warehouse or cash bond)
- Credit reports
- Levies
- Statute of Limitations, returned checks, undeliverable checks
- Taxpayer refund request of issued credit

TAA Examiners review refund requests to determine if the documentation is sufficient so they can substantiate the claim.

Outputs for this process are as follows:

- Paper Checks
- Electronic Credit (EFT)
- Automated Small Business Credits Refund
- Manual Refunds
 - Fedwires
 - o Misc. Tax Refunds
 - Cigarette Tax
 - Motor Vehicle Excise Tax
 - Real Estate Excise Tax
 - Economic Assistance
 - Aircraft
 - Trailer
 - Watercraft Excise Tax

REFUND CHALLENGES

Overnight process.

There are no refund reason codes on the electronic refund letter.

Multiple steps and screens in the refund process.

Can't exit the refund process once it is started.

No breakout of the tax detail.

No refunds on the last working day of the month.

With manual refunds there is no audit trail/data in the system.

Multiple invoices in one refund are difficult to see in one place.

Steps required for the approval process are cumbersome and requires some manual notification to management.

Return checks, Statue of Limitation checks (SOL), and lost or stolen affidavit of warrant process requires research before the process can be completed in Revenue Accounting, which requires coordination between process areas.

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System has a limitation when needing to "undo" a manual refund (e.g., Fedwire returned to the department).

The process for determining if a refund should stay in TAA or go to the Audit division because the periods are included in an audit is manual and so is the tracking.

5.1.4 Penalty Waivers

Sources for waiving penalties are as follows:

- Paper or electronic request that is indicated from the tax return
- Paper or faxed requests from field Revenue Agents
- Balance due notices
- Secure messaging
- Due to a determination or appeal
- Due to Closing Agreement
- General correspondence

TAA Examiners review penalty waiver requests to determine to grant/deny the waiver request.

The outputs of this process are as follows:

- Balance due
- Credit/refund applied to the previous debt
- Penalty waiver or denial letter
- Penalty assessed
- · Penalty waived

PENALTY CHALLENGES

If the penalty isn't assessed it must be established and then removed to show the correct audit trail.

Requires manual adjustment.

Notification to the taxpayer is manual.

Waiving the penalties between ET and TARIS systems, two transactions are required.

Recalculation of short pay penalties due to partial penalty waiver.

Manual Examiner notes in the system are not detailed enough.

Short pay calculation – standalone application to calculate.

5.1.5 Correspondence

The inputs for this process are as follows:

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- Questions from taxpayers via secure messaging, paper documents, or faxes
- Documents that are processed into the incorrect queues
- Substantiation of missing deduction detail, credits or missing addendums
- Requests for permanent extensions and change of reporting, cash vs. accrual or 13 month reporting cycle

The TAA Examiner identifies the issue and researches the account to resolve the issue.

The outputs of this process are as follows:

- Letter/Secure message to the taxpayer
- Adjustment to the account
- Redirected to the correct process area
- Phone call to the taxpayer

CORRESPONDENCE CHALLENGES

Unable to identify the various types of correspondence correctly, which causes the misdirection of documents and manual review for staff.

See challenges under IDOC's regarding distribution of work to the queues.

Manual requirement to leave a note as to whom the work is assigned.

Multiple workflows causing duplicate work and staff getting credit for work not actually completed and it overstates our inventory. Could be integrated with EOB workflow.

5.2 TAA Program and Other Functions

There are multiple sections or units within TAA that are responsible for various functions and programs. This section will show what the TAA Division supports.

The following is a list of the Tax Programs, Credit Programs and Other Functions for the TAA division.

5.2.1 Tax Programs

- Consumer Use Tax On-line Application Consumer Use Tax
- E-911 (Wire line, Wireless, WTAP, TRS, VOIP
- Oil Spill
- Semi Conductors Tax Program
- Fish Tax
- Gambling Taxes/Lottery
- Other Tobacco Products Tax
- Spirit Sales Account
- Litter Tax Program
- Streamlined Sales Tax
- Leaded Racing Fuel
- Brokered Natural Gas (BNG)

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TAX PROGRAM CHALLENGES

Some tax programs have special requirements.

Some require manual processing and tracking using outside applications.

Letter generation is manual.

Paper reports.

Outside reliance on leads/data from other agencies and they are not managed efficiently (may not include the UBI numbers).

SER figures have to be backed into in ET causing possible rounding issues.

5.2.2 Mainstream Tax Credits

The following mainstream tax credits require no application or up front approval and have no program caps to monitor.

- Small Business B&O tax credit (SBC)
- Service & Other Small Business B&O tax credit (SBC)
- Multiple Activities tax credit (schedule C) (MATC)
- Bad Debt tax credit (schedule B)
- Hazardous Substance tax credit
- Tobacco Products/Cigar Tax Credit
- Sales Taxes Paid to Other States

These credits do have edit checks within the ET system process and EOB when errors are identified. Only the two SBC credits are automatically recalculated when adjustments are made to ET.

The ET system has program logic on the buy down of these regular credits along with special credits.

CREDIT PROGRAM CHALLENGES

Buy down programming of any new credit with existing credits including special credits.

Complexity of the Multiple Activities Tax Credits.

Complexity around having 2 Small Business Credits for taxpayers and staff.

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Bad Debt tax credit often causes negative tax situations.

Bad Debt tax credit is backed into using the local tax pool codes; not directly back to the local jurisdiction. Detail is not required to be filed with the Department.

5.2.3 Credit Programs

TAA has Credits programs each with their own unique rules for applying and processing the credit within the Core Tax System. Each of the credit programs and the accompanying TANDEM screens are different based on the needs of the program. The credit programs are as follows:

- Forest Derived Bio Mass Credit
- Syrup Tax Credit
- Low Income Home Energy Assistance Program (LIHEAP) Credit Program
- Renewable Energy Cost Recovery Credit Program
- Warehouse Tax Incentive Refunds
- Commute Trip Reduction (CTR) Credit
- Customized Training B&O Credit
- High Technology Credit
- High Technology Credit Donation
- Hospital Safe Patient Handling B&O Credit
- International Service B&O Credit
- Job Training B&O Credit
- Main Street Credit
- Motion Pictures Credit
- New Employee B&O Credit
- Pollution Control Credit
- Aircraft Prototype Parts RST Refunds

CREDIT PROGRAM CHALLENGES

Each program has different requirements starting from requiring an application to verifying information such as employment data, square footage, bushel capacity, and annual surveys. Other challenges are:

- A credit program can have one or a combination of the following caps:
 - o Program Cap over the life of several years
 - o Annual Program Cap (calendar or fiscal year)
 - Annual Individual Business Cap

Dependency on outside Agencies or Organizations for correct and complete data.

• Department of Archaeology, Motion Picture Association Employment Security Department (ESD), Washington State University etc.

Proration calculations are complex for CTR and LIHEAP.

Manual tracking required using outside applications.

Various ways to apply –paper & electronic causing duplication.

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Letter generation is manual.

Credit programs are not properly integrated into E-file.

New Employee Tax Credit verification is manual, variable, and no audit trail. Need to automate.

Functions are split between TAA & Special Programs –annual reports and billings. Notification needs to be incorporated into e-notification and the annual reports need to be integrated into our E-file system.

5.2.4 Other Business Functions

Aerospace Tax Incentives Reduced B&O Rate

Aluminum Smelters Credit/Incentive Reduced B&O Rate

Apportionable Income Reconciliation

Cash Bonds/Revoked Accounts

Closing Agreements

Corporate Board of Director's Fees

Corporate Non-Resident Permits

Data Center Exemption

Direct Sellers Organizations & Representatives

Electrolytic Indicator Incentive Reduced B&O Rate

Electronic Payments (EFT, E-Check, Credit Card, IAP)

Farm Equipment RST/UT Exemption (SHB 2457)

Fruit & Vegetable Exemption

Government Funded Mental Health Services Deduction

Intermediate Care Facilities (ICF)

Livestock Nutrients Exemption Program

Newspaper Incentive Reduced B&O Rate

Non-Sufficient Funds (NSF) Checks Tracking System

Permanent Extension Deposits

Relational Edit

Renewable Energy Sales Tax Exemption Program

Reseller Permit Program

Solar Manufacturing Incentive Reduced B&O Rate

SST Registrations/Updates

TARIS Verification Report

Tax Status Request

Timber Excise Tax Program Incentive Reduced B&O Rate

TFAs

Uncollectable Write-Off

Vessel Non-Resident Permits

OTHER BUSINESS FUNCTION CHALLENGES

Special requirements.

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Some require manual processing and tracking using outside applications.

Letter generation is manual.

Paper reports.

Outside reliance on leads from other agencies.

Functions are split between TAA & Special Programs –annual reports and billings. Notification needs to be incorporated into e-notification and the annual report needs to be integrated into our E-file system.

Manual adjustment is needed to clear the transactions on NSF tracking system. Need to be integrated into mainstream tax system.

Relational Edit (RE)

Relational Edit is a system of checks and balances to stop tax returns from posting incorrectly and ensuring accurate data is posted to the ET system. There are four separate reports that are worked on a daily basis.

RELATIONAL EDIT CHALLENGES

There is no audit trail/history to show the action taken by the examiner on all of the items.

Electronic payments lose their audit trail in the system if they are posted to CRMS instead of ET.

Batch process is used to update the changes and only looks at one error at a time so if there are multiple errors, it must be processed again.

Some items should error out as EOB's and should not be held up in RE.

TARIS Verification Report

The TARIS Verification Report is for payments that cannot post to a TARIS invoice due to system edits in the payment verification process.

TARIS VERIFICATION CHALLENGES

There is no audit trail/history to show the action taken by the examiner.

Electronic payments lose their audit trail in the system if they are posted to CRMS instead of ET.

Batch process is used to update the changes and only looks at one error at a time so if there are multiple errors, it must be processed again.

Unable to drill down into a warrant to the component piece level of detail easily.

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5.3 Business Registration Management System (BRMS)

The Business Registration System (BRMS) is the primary repository for taxpayer registration information. This system is accessed by all Core Tax System. The BRMS team in the Taxpayer Account Administration division is responsible for maintaining the information in the BRMS System. Employees in the BRMS team perform the following key functions:

- 1. Open new accounts
- 2. Adding branch accounts
- 3. Reopen closed accounts
- 4. Update account information

Open New Accounts

New accounts are opened based on information received from the following sources:

- BLS most new account registrations are received through this process.
- DOR field staff to register involuntary or temporary accounts, walk in registrations
- TAA staff to post a tax return or payment
- DOR staff in other divisions to open miscellaneous tax accounts:
 - ➤ Use tax
 - > Leasehold
 - > Timber tax
 - > Consumer cigarette tax
 - ➤ Real Estate excise tax
 - > Renewable energy
- Streamlined Sales Tax (SST) Registrations to register SST retailers

 DOR receives a daily file of new retailers that register under the Streamlined Sales and Use
 Tax Agreement. Registrations are downloaded to a web application (SST Review System)
 that allows staff to open, update, or close accounts in BRMS from the SST Review System.

Business Licensing Service – New Accounts

The BLS captures information from the taxpayer's BLA and passes this data to the BRMS system on a daily basis. This application information is referred to as an Agency Required Document (ARD). A BRMS batch program generates a paper report of UBIs for new accounts which is distributed to staff in the BRMS team. The report is used to assign accounts to BRMS employees to open.

Involuntary Accounts

Unregistered businesses with tax liability will be opened after an investigation by DOR field staff. The taxpayer is instructed to complete a BLA but may not do so.

Temporary Accounts

Businesses engaged in business less than two times a year and only lasting 30 days or less for each period are registered as temporary businesses. A BLA is not required. A temporary registration application form is completed instead.

Walk in Registrations

Any DOR field office can issue a UBI and open a tax reporting account. The taxpayer must provide a completed BLA and payment. The BLA is forwarded to BLS.

Tax Return or Payment Received with No Account

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An account may be opened to post a tax return or payment prior to receiving an ARD. In many cases, a BLA is never completed.

Miscellaneous Tax Accounts

In most cases, these taxes are for individuals rather than business entities. Miscellaneous taxes are generally not administered using the Core Tax System.

Steps Performed to Open a New Account

The following steps are performed when opening a new account:

- Assign a NAICS code
- Assign a reporting frequency
- Verify the mailing address
- Add business locations
- Add location codes
- Add tax reporting indicators

Assigning a NAICS Code

The business activity description provided by the taxpayer is reviewed by staff and a NAICS code is assigned. The code is manually assigned using the US Census website. The NAICS is relied on by the Forecast Council and Research division. It is also used to select targeted industry groups for notifications/mailings and verify tax reporting for special taxes and credits. The NAICS is also shared with the BLS system, which passes it to UBI agencies and partners that request it.

Assigning a Reporting Frequency

The taxpayer filing frequency is determined based on the estimated gross income amount indicated by the taxpayer on the BLA and the type of business.

Verifying the Mailing Address

The mailing address provided by the taxpayer is manually verified through the United States Postal Service (USPS) website and corrected if necessary. The mailing address on the account is used to create address label files for paper correspondence. BRMS is limited to one mailing address per account. Addresses must be US or Canadian. If a foreign address other than Canadian is provided, the account cannot be opened. The taxpayer must be contacted to provide a valid address.

Adding a Business Location

A business location is the physical location of the business. A business may have multiple locations. Each location is added to the BRMS data base and includes the following information

- > 3 digit ID
- > Name
- Address
- > Phone
- Open date
- > First open date
- Location code
- Activity Description
- > Tobacco and Cigarette licenses

The UBI number is the only common identifier between BLS and BRMS accounts. When there are multiple locations and tax accounts for the same UBI, a manual review to match the BLS location

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with the correct BRMS account and location is required. This is time consuming and increases the risk for the wrong account to be updated, duplicate locations or accounts to be added.

Adding Location Codes

The location code is used to validate that the correct location code is used for reporting sales taxes. The BRMS system will auto assign a location code based on the city location name. However, using the city alone to determine the correct location code can be incorrect. Sales tax boundaries are complex and the entire address must be used to determine the correct location code. It is preferred that staff use the GIS address lookup tool to assign the correct location code; however, BRMS is not able to integrate with this tool.

Outputs from Completing the Open New Account Process

Once the new account has been set up and completed in the BRMS systems the following occurs:

- A new business letter is mailed to the taxpayer
- Outstanding tax returns are established on the OSR system
- Accounts filing by paper will begin receiving a tax return in the mail

Adding Branch Accounts

Taxpayers may have more than one business or location and request to file a separate tax return for each one. BLS sends an email request to the BRMS team for a branch account **before sending the ARD**. BRMS staff contacts the taxpayer and verify a branch account is needed. In many cases, the taxpayer requested it in error on the BLA. If the request is approved, a branch account is opened and a new Tax Registration Number (TRN) is assigned. The branch TRN is linked to the same UBI number. BLS keys the branch number to the location in BLS. The ARD is then sent to BRMS to complete the account. An ARD must be received and complete for the account so it is not treated as a partial account for future ARDS.

A challenge with branch accounts is they have their own unique TRN even though they are also linked to the same UBI. The first TRN number assigned is always the same number as the UBI. Any additional TRNs issued for the same UBI will have a different number. If the first TRN closes but the branches are still open it may appear the UBI is inactive with DOR. A temporary solution for this problem is to not close the main TRN and change it to an active non-reporting account instead.

Reopen Closed Accounts

Requests to reopen closed accounts are received from:

- 1. The Business Licensing Service
- 2. Taxpayer phone calls
- 3. Email requests from staff for accounts closed in error.

Business Licensing Service

The BLS captures information from the taxpayers BLA and passes this data to the BRMS system on a daily basis. A BRMS batch program generates a paper report of UBIs for reopen accounts, which is distributed to staff in the BRMS team. The report is used to assign accounts to BRMS employees to reopen.

Closed accounts are reopened if a taxpayer opens another business rather than issuing a new number and account. The old account information is updated for the new business. This can be a problem when the wrong account is reopened. The old information is not easily accessed from one screen and some fields such as DBA name are completely removed. Staff may have to rely on

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information from the Business Licensing Service to correct the account.

Taxpayer phone calls

An account may have been closed in error. If it is more than 30 days after the closure activity, the taxpayer must complete a new BLA to reopen the account.

Email requests from staff for accounts closed in error

Staff from other divisions or agencies request that accounts that are closed in error be reopened.

Steps Performed to Reopen a Closed Account

See section for opening a new account.

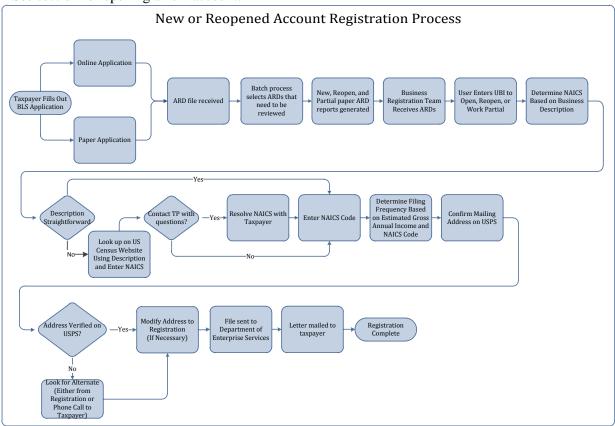


Figure 5-1: Registration New Account

Updating Account Information

The BRMS team receives requests to update tax account information from:

- 1. The BLS called maintenance ARDs
- 2. IDOCS address and closure queues
- 3. Email requests from internal staff and agency partners
- 4. Taxpayer phone calls

Business Licensing Service – Maintenance ARDs

The Business Licensing Service captures the information and passes the data via an ARD to BRMS and all UBI agencies and partners. An ARD is determined to be maintenance if all tax accounts are open and completed. Maintenance ARDS are worked from a queue in BRMS. Staff can pull ARDs

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into a personal queue. The UBI number is entered on the ARD screen in BRMS to view the license information. If there is multiple TRNs for that UBI, the user must select which TRN to update. The system shows a comparison between ARD fields and existing BRMS fields. If different, the field is highlighted for staff to review and decide if an update is needed in BRMs. When the maintenance ARD is completed, any changes made on the ARD screen automatically updates the tax account in BRMS.

Common changes requested through the maintenance ARD process are:

- add trade names
- > open additional business locations
- add license indicators for tobacco and spirits

IDOCS Address and Closure Queues

Address changes, contact information changes, and closure requests from paper tax returns and correspondence, BLS Change Forms and account update/closure web forms are imported to an IDOCS work queue. Taxpayers can also update or close their account online through "My Account". In most cases, the updates are done immediately, however, any exceptions are sent to the IDOCS queue for BRMS staff to review. Staff retrieves the image from the work queue and makes the update in BRMS.

Email Requests from DOR Staff and Agency Partners

Requests from DOR staff and agency partners are usually to:

- Close an account
- Change the reporting frequency
- Account cleanup correcting accounts setup incorrectly

Taxpayer phone calls

Staff receives calls from taxpayers to:

- Change or add a Doing Business As (DBA) name staff needs to verify in BLS if the fee was paid.
- Change the reporting frequency
- Close the accounts
- Correct the address and phone number

There is no automated process to share updates to BRMS accounts with the BLS system. BRMS does provide reports of active and closed accounts; however, because of the difficulty in matching BRMS accounts with BLS accounts, there is not an automated update process between the two systems. Changes are communicated via email.

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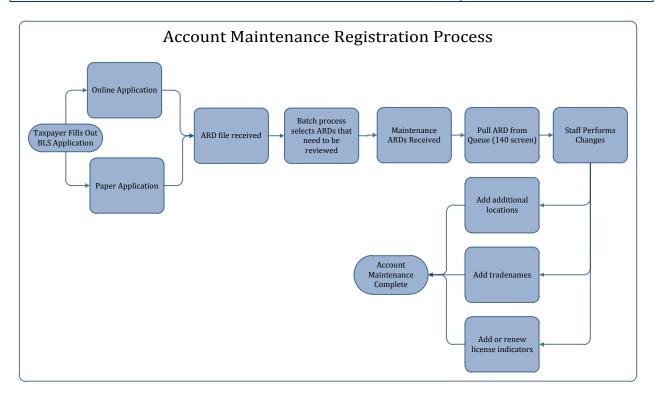


Figure 5-2: Registration Account Maintenance

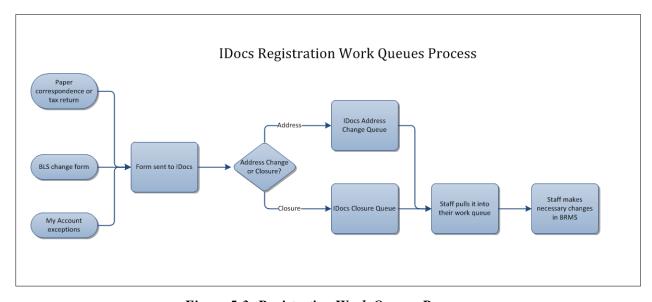


Figure 5-3: Registration Work Queues Process

REGISTRATION CHALLENGES	Opportunities
Business account information is duplicated between BLS and BRMS systems and the only common identifier to link accounts across system is	

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the UBI #. One UBI can have multiple accounts and locations. Both systems use different numbering schemes for sub accounts and locations so automating updates between systems is not	
possible. The maintenance changes are not shared between systems or outside agencies.	A new system would look to integrate information into one system.
Accounts opened without an ARD are not setup up with BLS and UBI agencies.	A new system to track accounts opened without an ARD and ability to share information with UBI agencies.
The address provided by the taxpayer has to be manually verified against the USPS website to determine if it is a valid address.	New Core Tax System Replacement would provide automated verification that an address entered is valid by USPS.
The current program that assigns a local sales tax code for a business location is not as accurate as using the GIS address look up tool.	A new system that can integrate with GIS and accurately assign LSU codes.
BRMS is limited to one mailing address per account; however, BLS allows a different mailing address for each location. This is confusing for BRMS staff to identify which mailing address should be maintained for the tax account.	A new system to integrate BRMS and BLS systems.
BRMS only allows a US and Canadian mailing address. Some valid addresses exceed the allowable field length in BRMS.	A new system to allow foreign addresses.
Not all previous account information is retained when an account is reopened. Staff must look at several different screens and BLS to see previous history.	A new system to provide a history screen of previous changes in one place.
Requests to add or change DBA names must be verified the five dollar fee has been paid in BLS before an update is made in BRMS.	A new system should provide the ability to automate the manual steps staff takes to verify registration information.
Notes for accounts are not stored in one central location. Staff must enter separate sections of the system to read all of the notes for an account.	A new system should provide a central place to view notes and search by UBI, SSN, and key words.
BLS and BRMS systems do not have a search capability by SSN or FEIN.	Search capabilities that allow SSN or FEIN search will allow user to increase productivity because the research and information needed to complete a registration would be much easier to find.
Update screens are not always user friendly. For example, when deleting the name on the first line within the "Cross References" update screen the name on the line below will not automatically move up. It has to be manually moved to the 1st line.	New Core Tax System Replacement would provide for more user friendly design features that will decrease the amount of time staff have to manually update information.
Duplicate accounts can be created if the system does not exactly match the name of business and the FEIN or Social Security Number. The result is manual work to close one account and determine which one should be closed.	Automate matching with more criteria or partial searches to display a list of possible matches. Allow searches by FEIN, SSN, and names with special characters.

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BRMS is limited to one email address per account and no way to identify whose email it is, CPA or taxpayer.	

5.4 Integrated Document Systems (IDOCS)

IDOCS is the primary repository of taxpayer documents in the Department of Revenue documents. The ICAP team is responsible for prepping, scanning, keying, and verifying all paper documents received by the department. Outputs from the IDOCS process feed information to the ET, IDOCS (Imaging), and OSR.

Major documents processed by the ICAP Team are:

- Tax Returns
- Remittances
- Assessments
- Tax Warrants
- Reseller's Permit Applications
- Correspondence

Batch Preparation

Paper tax returns and payments are received through the mail, which is opened by Cash Management. Cash Management:

- Separates documents into Money vs. No Money batches
- Creates and Prints a Batch Header sheet for each batch
- Sends copies of checks received without a tax return to the Warrant Team for identification
- Delivers completed batches to the ICAP Team for scanning

The batch header includes the batch number, received date, total dollar amount, and number of documents in the batch. The ICAP team can correct batch headers for batches with no money, but if there is money involved the batch must be sent back to Cash Management to correct. Once batched, the documents are taken to ICAP for prepping, scanning, and keying.

The Warrant Team creates the Remittance Memorandum document for each check and returns the documents to Cash Management for batching.

When received, the ICAP team must prep the batches for scanning by:

- Making photocopies of any document that:
 - o Is not 8 ½ by 11
 - Contains red ink or light ink
 - Is too fragile to go through the scanners
 - Contains Post-It notes or tape
- Removing staples and paper clips

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- Inserting separator sheets between documents without bar codes
- Adding indicator box labels where necessary (Routes documents to work queues in IDOCS)
- Following a detail list of procedures

Daily Correspondence is paper documents generated by Taxpayer Account Administration, Compliance and the Audit divisions. These documents are coded by the originator with a:

- UBI number
- Category
- Form Type
- Period
- Year
- Operator Number

These documents are sent to the ICAP teams for scanning and keying. ICAP sorts these documents by Category and Form Type. Each Category and Form Type will become a separate Daily batch. They then create a batch header for each daily batch. The batch is prepped according to the same procedures as tax returns.

Scanning

There are three (3) scanners:

- The first is used only for BLS documents
- The second can be used for BLS or DOR documents
- The third is strictly used for DOR documents

These scanners use two different software packages. The BLS scanner uses Kofax. The DOR scanners uses Impression Technology.

When scanning, the employee selects a batch class for each batch and then places the batch into the scanner. The scanner reads the batch header information created by Cash Management. However, batch header information created by the ICAP team must be keyed. As a batch is scanned, the documents display on a screen to ensure the image is clean and imaged correctly. The scanner then creates an image of all documents within the batch. The images and batch header information are then passed to the keying system for further processing.

Keying

Most tax returns are Key from Image documents. This means that all information on the tax return is keyed manually. All keyed information goes through a series of business rules to insure keying accuracy. If a keyed field fails an edit, the document goes into an error queue to be reviewed by a Forms and Records Analyst in the ICAP team.

Some tax forms and Remittance documents are OCR/ICR compatible. The imaging system attempts to read the information on these forms. Any field that fails a business rule or that the OCR/ICR software is unable to read accurately is presented to a keyer for verification.

Daily batches do not have a lot of keying. The only information keyed from these documents is the UBI #, and the Period/Year. The Category/Form Type information from the batch header is attached to each document within the batch as well.

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Outputs

Once a batch is keyed and passes all business rules, the system formats the output files for each document. Data is passed to the following systems:

OSR

For tax returns, the system generates the following:

- TANDEM upload file containing all the tax information
- IDOCS upload file containing the document images and index information
- OSR upload file indicating that a tax return was received for an account for a specific period/year

The TANDEM and OSR files are uploaded three times a day. The IDOCS file is uploaded every three minutes.

Tax return data is uploaded into TANDEM and goes through a series of business rules. If an item fails an edit, it will either show on the Relational Edit report or be placed in an EOB queue for further review. If no errors, the document will post to the appropriate system.

Remittance documents have two output files:

- TANDEM
- IDOCS

Remittance documents may post to ET, TARIS or CRMS depending on the payment information.

Once keyed daily batches produce only one output, an IDOCS file.

IDOCS images are indexed by:

- UBI number
- Category
- Form Type
- Year
- Period
- Received date
- Batch number
- Document locator number
- Scan date
- Scan person
- Index date
- Keyer ID

Documents can be retrieved by any index field or combination of fields. For example, a batch can be pulled by batch number and received date to view all applicable documents. Any document retrieved contains all backup documentation.

On entering IDOCS, documents go through a series of business rules to determine if the document will be routed to a work queue or just be archived. In either case, the document can be retrieved for viewing.

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Blank pages are not sent to be keyed or to the imaging system.

This team has a performance measure to make sure tax returns and remittance documents are scanned into the system within 24 hours of receipt by the department. Reports are generated by the system to track performance.

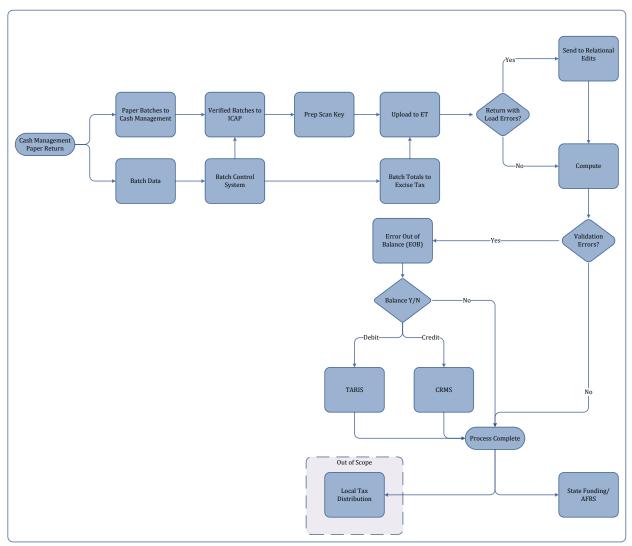


Figure 5-4: IDocs Paper Tax Return Process

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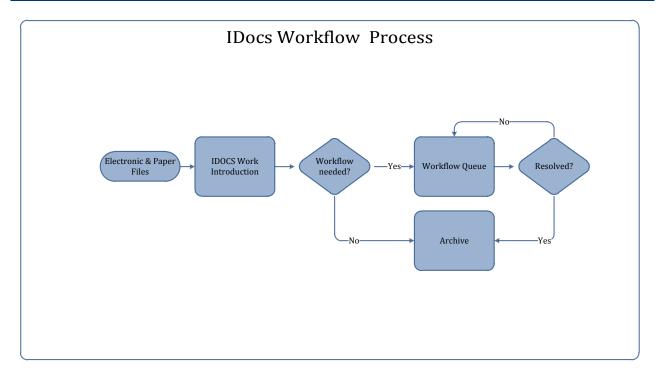


Figure 5-5: IDocs Workflow Process

Electronic Process

In addition to paper, taxpayers and DOR staff can create a number of documents electronically. These documents are downloaded into IDOCS and TANDEM nightly.

The secure website, "My Account", allows taxpayers to conduct business with the agency, including:

- Electronically file their tax return
- Change an address
- Close an account
- Apply for a Reseller's Permit

Tax return and payment information is uploaded into TANDEM and the same business rules as paper returns apply. If a tax return or remittance fails an edit, the transaction is placed in an EOB queue for further processing. If the document passes all the rules, it will post.

Items such as address changes, closures and reseller permits upload into IDOCS, and the same business rules as for paper apply. The rules determine if an item is to be placed in a work queue for further review or sent to archive.

Transactions entering IDOCS also go through business rules. The rules determine if a transaction is to be placed in a work queue for further processing or sent to archive for future retrieval.

DOR staff creates a variety of electronic documents on a daily basis:

- Correspondence to taxpayers
- Excel spreadsheets

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Email responses

Employees can save their document to a folder on a specified drive. The Auto-Importer runs four times a day. It reads the folder, imports the image, and indexes the image for future retrieval. Documents entering via the Auto-Importer will only go to archive. They currently do not enter any work queues.

The IDOCS system also receives virtual faxed documents. These files are initially sent to a server. The system pulls these documents every hour. The images are then indexed and sent into various work queues in the IDOCS system.

IDOCS CHALLENGES

DOR Imaging machine software is not compatible with Windows 7. A new imaging system would bring imaging into current technology.

Two different imaging systems do not allow communication between BLS and DOR. One imaging system would allow a streamlined process for DOR and BLS imaging.

Some electronic documents are still being printed only to be scanned back into the system. Automate importing of electronic documents using tools such as the Kofax email integrator.

No workflow is available for BLS documents.

No longer need OCR/ICR technology.

Trouble with vendor response.

Difficulty in searching for documents, for example, many items are indexed as COR, cannot identify what the correspondence is for. Need a more detailed index.

Documents are not automatically imported without a staff member placing the electronic document in a specific file or specific naming convention.

Staff is able to send item to default workflow without working it. Need a check/balance to affirm items worked.

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5.5 Excise Tax System (ET)

The ET System is used to manage all filed tax returns down to the tax return level detail and supports all funding to the general and dedicated funds by Revenue Accounting:

- 1. Process tax returns
- 2. Fund the tax returns
- 3. Local tax distribution
- 4. Examine, adjust and reconcile taxpayer accounts to ensure proper reporting.

Sources for this system and the tax return process are as follows:

1. Paper and Electronic Tax Returns

Tax Subtypes:

Excise Taxes (ET)
Use Tax (UT)
Public Works Contract (PWC)

Tax returns that are received go through a compute process and are posted to the system. Errors are identified and dropped into various work queues. Staff work tax returns with errors and the following results can happen:

- Adjustment to balance the period.
- Adjustment to issue a receivable in TARIS
- Adjustment to establish, issue or refund in CRMS

When the returns are posted, the funding will occur if a payment is received. For returns without payment, funding occurs when ET is notified from the receivable system that payment has been received.

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Paper and E-file Tax Returns Processing

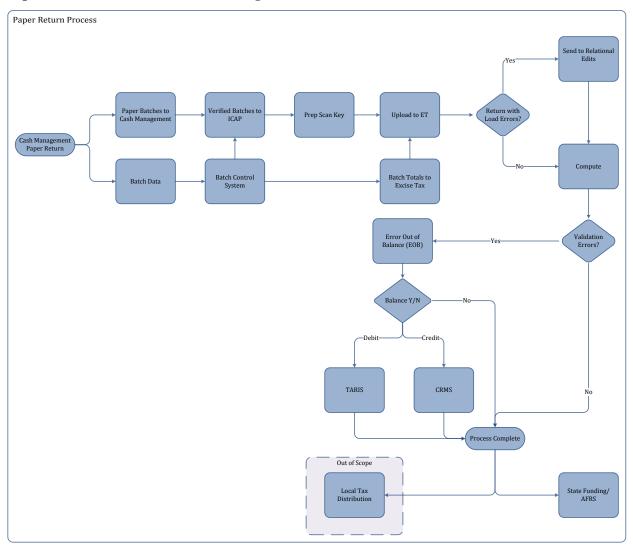


Figure 5-6: Paper Tax Return Process Flow

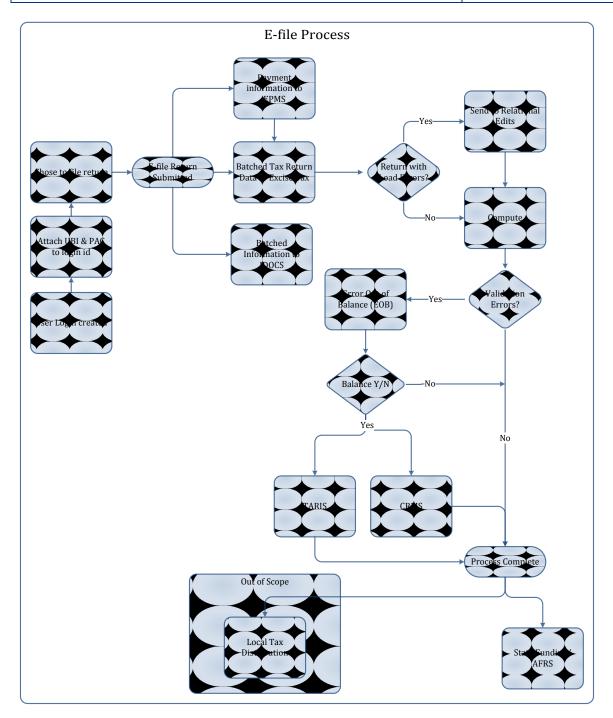


Figure 5-7: E-file Process Flow

Outputs for this process are:

- Processed tax return
- Payments posted to taxpayer account

ET System Challenges

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There are too many EOB queues to work and further automation could be applied.

There is concern in further automating items such as Special Credits.

Examiner is required to move between systems to research an account. This adds to the amount of time it takes to resolve issues. A new Core Tax System Replacement would allow users to spend more time fixing errors instead of navigating through multiple systems. A user interface that is similar to their "My Account" screen will allow one stop for information.

The systems require overnight processing to verify changes and can take multiple days to complete actions on an account.

The system is slow in response to user actions and can make the user wait for the screen to show results. The system should have faster response times with relational databases and common system architecture.

The process for working the EOB queue could be improved, as it requires manually reviewing the list of EOBs and pulling out those that need to be worked by the Special Credits group. It is not apparent what the type of special credit is prior to working it.

Supervisors can assign EOBs to Examiners, but only on a case-by-case basis. Can only bulk assign by one error code and in a block of numbers. Supervisors need the ability to sort queue by various categories and to assign work from the EOB queues in bulk if needed.

Unnecessary adjustments are needed to the system to allow negative taxable amounts.

System does not calculate penalty correctly in multiple situations: Short pay and penalty calculation.

Inability to sort work queues by any method to prioritize or identify work (e.g., received date, frequency type, by division, credit type, and assigned user).

Tax returns with multiple errors that are worked by an Examiner are not re-validated to ensure that all errors have been addressed.

Various processes are held on local tax distribution day. This can cause a problem if an Examiner works that period affecting the process that is completed the following day, which can cause duplicate data.

The system is not able to reconcile a debit amount paid because it is expecting a negative amount, which causes a work around. Otherwise, if it is not resolved up front a data fix is required.

Hidden function keys & screens

If a second adjustment is done to PUT it loses the logic for the PUT thresholds. This started when the SF9 function key to the confirmation process.

Subtypes are broken out and require the staff to adjust them separately. They aren't always obvious to the staff when reviewing the account.

Streamlined returns EOB out due to rounding issues between the streamlined service submitting the tax returns and the ET process receiving the tax returns. These figures are back into by the ET system.

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5.6 My Account

My Account provides a secure environment for the taxpayer to do business with the Department. My Account includes the following services:

- E-file
- Amend a tax return
- Reconciliation of Apportionable Income
- Manage Business Account
- Bill Pay
- Make a Payment
- Credits & tax incentives applications
- Secure Messaging

MY ACCOUNT CHALLENGES

Security is duplicated across the applications instead of having it in one place.

Security does not meet the Secure Access Washington (SAW) requirements.

5.7 Taxpayer E-file Process

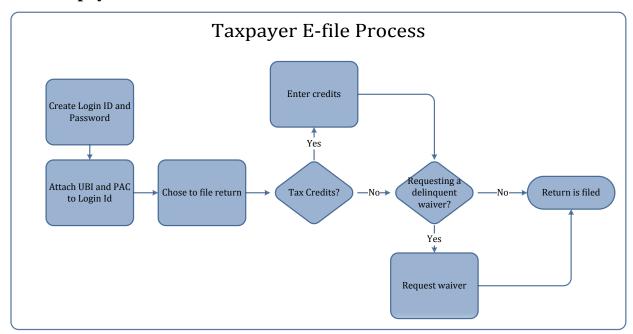


Figure 5-8: Taxpayer E-file Process

E-file

E-file is free and secure service that enables the taxpayer to prepare, file and pay their tax return electronically any time of the day. Over 87% of our tax returns are filed electronically causing a significant drop in the amount of relational edit.

• It is customizable and automatically calculates tax as the taxpayer fills out their tax return. It has

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warning or errors to assist the taxpayer in reducing errors.

- There are several payment options available: Automated Clearing House (ACH) debit, ACH credit, ICK, CCP, IAP, and paper check.
- Each night the tax returns are offloaded to the ET system for processing and images of the tax return are sent to IDOCS.

E-FILE CHALLENGES

Taxpayers confusion around payment due dates after the return is filed - unsure if payment was submitted timely. The Department would like the Compliance Division to be able to post estimated electronic tax returns for delinquent taxpayers enabling TAA to issue estimated assessments to facilitate the collection process and eliminate the CAS.

Credit program caps are not integrated into the E-file system.

Business rules are not consistent between E-file and ET (e.g., negative gross calculation for service SBC credit).

Load issues can occur during the peak filing time.

Taxpayer is unable to apply a credit in part, must be fully applied.

Taxpayers still have problems navigating through the E-file tax return, because the user interface is not intuitive.

After business hours, the taxpayer is unable to make adjustments to pending filed tax returns. They have to call the Department for assistance to clear their return.

5.8 Taxpayer Accounts Receivable Integrated System (TARIS)

The TARIS system is used to manage the receivables by assessing tax, penalties and interest and collecting payments to satisfy the debt. TARIS uses the following invoice types:

- 1. Unpaid Tax Return (UTR)
- 2. Balance Assessment (BAS)
- 3. Compliance Assessments (CAS)
- 4. Tax Assessments (TAS)
- 5. Warrants (WAR)

The mainstream tax type that TARIS manages is Excise Tax (EXC), but it also includes the following exceptions:

- AIR Aircraft Tax
- BNG Brokered Natural Gas Tax
- CIG Cigarette Tax
- EST Estate Tax
- FIS Fish Tax
- FOR Forest Tax
- HWG Hazardous Waste Generation

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- LEA Leasehold Tax
- MVT Motor Vehicle Excise Tax
- OIL Oil Spill Tax
- PRO Promoter Penalty
- RET Real Estate Excise Tax
- TRL Trailer Tax
- USE Use Tax
- VSL Vessel Tax
- WTR Watercraft Tax

Balance Due Assessment (BAS)/Unpaid Tax Return (UTR)

- Created from a batch process which picks up underpaid balances and unpaid balances
 - o ET BAS/UTR can get created via ET screen 280
 - o MT BAS/UTR can be created from TARIS screen 470.
 - o FT BAS/UTR is also created from a FT process.

Compliance Assessment (CAS)

- Created from past due outstanding tax return periods (OSR's)
 - o Issued using the TARIS screen 466

Tax Assessment (TAS)

- Created from audits or review of taxpayer records over multiple years.
 - o Issued through the ARS, a Visual Basic application.
 - o TFA –using the TARIS 472 screen
 - Miscellaneous TAs are issued using the TARIS screen 474 or 475

Warrants (WAR)

- Created by assuming a BAS, UTR, TAS, or CAS which are not paid by the invoice due date.
 - The original warrant is issued through TARIS Screen 442.
 - O Supplemental warrants are auto issued when a component invoice assumed into a warrant that has been paid and legally satisfied is adjusted and the adjustment causes an increase in liability.

Penalties:

The following table lists the penalties calculated on the different receivable types.

Penalty Type / Statute	Penalty Description / Rate
Late payment of a tax return	5% of tax not paid by the statutory tax return due date, or any extended
RCW 82. 32. 090(1)	due date. Increases to 15% one month after the due date and then to
	25% two months after the due date. (See RCW 82. 32. 045 for when
	taxes are due.)
Unregistered taxpayer	5% added against unpaid tax when Department discovers a taxpayer
RCW 82. 32. 090(4)	who has taxable activity but has not registered.
Assessment (includes a	5% included in an assessment when it is issued if the tax was
"Notice of Balance Due")	"substantially underpaid." Increases to 15% on tax not paid by the due
RCW 82. 32. 090(2)	date and then to 25% thirty days after that.
Issuance of a warrant	10% added when a warrant is issued to collect unpaid tax. (Penalty is
RCW 82. 32. 090(3)	not based on filing of the lien, only issuance.)

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Disregard of specific written	10% added when the Department has provided specific, written	
instructions	reporting instructions and tax is underpaid because the instructions are	
RCW 82. 32. 090(5)	not followed.	
Evasion	50% added when tax is underpaid and there is an intentional effort to	
RCW 82. 32. 090(6)	evade the tax.	
Misuse of reseller permits	50% added against unpaid sales tax when a buyer uses a resale	
RCW 82. 32. 291	certificate but should not have.	
Failure to remit sales tax to	10% added against sales tax when the Department proceeds directly	
seller	against a buyer who fails to pay sales tax to the seller as part of a sales	
RCW 82. 08. 050(6)	taxable retail purchase.	

Interest:

- Debit Interest (RCW 82. 32. 050) added whenever underpaid tax or penalty is assessed.
 - Once started, interest accrues daily. The interest rate is found in RCW 82. 32. 050 and is updated annually. (See RCW 82. 32. 060 for credit interest on overpayments.)

Adjustments:

- Manual adjustments are made to tax, penalty and interest.
- Manual adjustments to BAS or UTR invoices feed back to ET, which require another manual adjustment within the ET system.
- Adjustment transactions are applied to liability, payments, or other transactions.

Payments:

- Payments are generally applied in the following order, interest, penalty, and tax. Exceptions:
 - Payment to a successor-ship and a closing agreement remittance, these pay down tax first, then interest and penalty.
 - o Liquor taxes are required to be paid down after all other taxes
- TARIS accepts the following payments: ACH debit, ACH credit card, e-check (one-time debit), and check
- TARIS has a payment verification process. It looks at the following to validate the payment: Transaction type, effective date, payment amount, invoice number, period year. When a matching transaction is found then the transaction is marked as verified.
 - Exception: TARIS Verification Report
 - If any of the above validations fail, the payment errors out and is reviewed by an examiner.

Special Functions:

TFAs

• TFA is issued against a corporate officer and is for sales tax only. In order to arrive at the liability, an Excel spreadsheet is used to determine what the current tax, penalty, and interest is for the sales tax portion of the business liability for the periods in which the Responsible Officer is responsible. TARIS does not split up Sales Tax vs. Business and Occupation (B&O) tax so the Examiner must manually calculate the breakup. There is a separate screen to enter the TFA and a new invoice is issued on that account, but it is excluded from the DOR's Accounts Receivable reports so as not to double count the amount. An auto note is created that ties the liability back to the corporation, but TAA must manually apply payments to each warrant which can be very time consuming.

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Closing Agreements

• Closing agreement transactions occur for businesses that enter into an agreement with the agency. The agreement usually stipulates that the taxpayer must pay some portion of the debt and the difference will be waived. The remaining balance is waived with a transaction code of CLS. This freezes the invoice and allows no further adjustments to occur. These agreements usually stipulate that no other transactions are allowed on the period, but this information does not relay to ET or to the Audit Transcript System. This causes issues when examiners attempt to work refund requests or amended tax returns later and do not see the CLS transaction code that is only located in TARIS on a particular invoice.

Closing agreements create funding challenges when the invoice has dedicated funds.

Account write-off

• The agency writes off accounts after twelve years, through the twice yearly write-off process. This is completed through a manual review by the Warrant Team manager. Taxpayers' accounts are selected by the issue date for review. This causes problems because warrants may be filed at any time within statute, and may be re-filed after the first ten year period has expired. Any invoice that is still in statute or where the taxpayer is making payments is manually removed from the write-off. There are approximately 1,200 invoices per write-off period. When a corporation has a TFA issued against the corporate officers the sales tax debt remains in statute longer because a warrant is filed against the corporate officers individually and this occurs after the corporate warrant. The reports for write-off cannot easily identify these accounts, which requires the manager to review each account in detail to determine if debt is truly past statute.

Once an account is written-off in this process it cannot be re-established as it is deleted completely, leaving no audit trail. During the course of a year a limited amount of taxpayers will come forward on written off debt wanting to clear their credit report. Compliance will clear the lien as past statute, but taxpayers sometimes want to make a payment in good conscience. Putting these payments into the system is difficult and time consuming.

TARIS CHALLENGES

Manual adjustments to BAS or UTR invoices feed back to ET, which require another manual adjustment within the ET system.

TARIS does not split out Sales and B&O making it difficult to determine how money got applied. Financial transactions are comingled across tax types making it difficult to determine what happened on an account.

TFAs are manually intensive and performed outside of the system via an Excel workbook – with the results of that workbook being put into the system.

Funding issues for dedicated funds with the closing agreements and the write off process.

The write-off process is time consuming and almost completely manual. The system is unable to determine items that are truly past statute or where taxpayers are in long term payment arrangements.

Supplemental warrant does not net the amount due, only looks at one component invoice at a time.

No audit trail (transaction history) once an account is written off

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Many different types of interest in the system depending on the invoice type. Example, additional interest on a BAS, becomes extension interest when assumed into the warrant invoice.

Face interest vs. additional interest –causes confusion for staff. Additional interest is calculated daily. Face interest is calculated from the 1st day of the month following the tax returns due date out to the due date of the invoice.

Payment verification process sometimes verifies the wrong payment. It has a difficult time dealing with multiple payments received within a 3 day timeframe.

When unassuming invoices from a warrant, it has to be completed in the exact order of events otherwise a data fix is needed.

Once an RMP payment is applied in the face of the tax assessment, there is no mechanism to remove it if it has been applied in error besides a data fix.

In certain situations, in order for the TAS invoice to print and reflect the correct amount paid, a work around in TARIS must be done, which causes TARIS to appear incorrect.

Liquor tax is an exception to the pay down rule and has not been automated. They are paid last after all other taxes.

Unable to reprint a balance due notice

There are issues around the e-withhold process, which require manual workarounds in TARIS and CRMS. For example bank requested a refund for a penny or tiny payments don't verify.

5.9 Credit Management System (CRMS)

The CRMS is used to:

- 1. Establish and Issue credits
- 2. Generate refunds
- 3. Manage various special credits

The mainstream tax type that CRMS manages is Excise Tax (EXC), but it also includes the following exceptions:

- Aircraft (AIR)
- Brokered Natural Gas (BNG)
- Cigarette Tax (CIG)
- Economic Assistance (EAA)
- Estate Tax (EST)
- Fish Tax (FIS)
- Hazardous Waste Fee (HWG)
- Leasehold Tax (LEA)
- Mobile Home Tax (MBH)
- Motor Vehicle Excise Tax (MVT)
- Oil Spill (OIL)

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- Trailer (TRL)
- Forest Tax Private (PR)
- Forest Tax Public (PU)
- Real Estate Excise Tax (RET)
- Vessel Tax (VSL)

Established Credits

Credits can be established into CRMS from the following:

- Creating a credit from an Excise Tax return –using the ET screen 280
- Moving a credit or payment from TARIS
- Working payments from the relational edit or TARIS correction reports
- Working the payment batches from Cash Management
- Payments from the My account Miscellaneous payment application
- Creating a credit -using the CRMS 525 screen
 - Cash Bonds
 - Warehouse Credits
 - Closing agreements
- Adding a new special credit certificate –using the CRMS 571 screen
- Refunded credits that are returned or become past statute –re-established by Fiscal using CRMS 568 screen

Issued Credits

Issued credits are initiated from:

- Issuing a credit notice from an Excise Tax return –using the ET screen 280
- Issuing a credit notice from an Established credit –using the CRMS screen 526
- Issuing a credit TAS from the ARS
- Issuing a Miscellaneous Tax Credit –using the TARIS screen 470

Note: Issued EXC credits can either be electronically notified or printed and mailed.

Refunds

Refunds are generated in the following ways:

- Small Business Credits are automatically refunded from the ET system
- Issued or Established refunds can be refunded through the automated process.
 - Paper check
 - o Electronic Credit (EFT)
- Manual Refunds
 - Fedwires
 - Misc. Tax Refunds (Tax Types from the List above)
 - Cigarette Tax
 - Motor Vehicle Excise Tax
 - Real Estate Excise Tax
 - Economic Assistance
 - Aircraft
 - Trailer
 - Watercraft Excise Tax

Credit Interest:

Credit interest (RCW 82. 32. 060) - is added on overpayments. The interest rate is found in RCW 82. 32. 050 and is updated annually.

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• Exception: Some special credits statutorily cannot receive credit interest. (Warehouse Credit)

Special Credits

DOR has many Special Credits each with their own unique rules for applying and processing the credit within the Core Tax System. Each of the credit process and the accompanying TANDEM screens are different based on the needs of the program. Only a few of these reside in the CRMS system. These are the Special Credits:

These are the Special Credits that reside in CRMS:

- LIHEAP
- Warehouse Tax Incentive Refunds
- CTR Credit
- Main Street Credit
- Motion Picture Credit
- New Employee B&O Tax Credit
- Pollution Control Credit
- Cash Bonds (Note: This is not a credit program, but money is established in CRMS)

These are the remaining Special Credits:

- Intermediate Care Facilities (ICF) (11 Facilities)
- Syrup Tax Credit (Quarterly Report from Research Division)
- Fish Tax
- Leaded Racing Fuel
- Customized Employment Training B&O Credit (Expires 7/1/17 (Survey)
- High Technology Credit (Survey)
- Hospital Safe Patient Handling B&O Credit (Expired 1/1/11 –carry forward until used)
- International Service B&O Credit
- Employee Training B&O Credit
- Aerospace Tax Incentives Credits and Reduced B&O Rate

CREDIT PROGRAM CHALLENGES

Each program has different requirements starting from requiring an application to verifying information such as employment data, square footage, bushel capacity, and annual surveys.

OTHER CHALLENGES

A credit program can have one or a combination of the following Caps:

Program Cap over the life of several years

Annual Program Cap (calendar or fiscal year)

Annual Individual Business Cap

Information sharing and reliance on outside Agencies or Organizations

Department of Archaeology, Motion Picture Association, ESD, etc.

Proration calculations are complex.

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Manual tracking required using outside applications.

Various ways to apply –paper & electronic causing duplication.

Letter generation is manual.

Other

Unclaimed credits are transferred to Unclaimed Property

CRMS CHALLENGES

Most credits must be applied manually.

CRMS system doesn't always reconcile automatically when buying down credits for a special credit.

Users are required to go to multiple screens in multiple systems to perform their work.

Files from other state agencies differ in file format and layout making it difficult to load information to the system.

In CRMS the system will not allow a credit to be edited instead of completely cancelling it and re-entering it. Once it is cancelled staff has to start the process over again.

Overnight process for issued credit notices and refunds.

Multiple steps and screens in the refund process.

Can't exit the refund process once it is started.

No breakout of the tax detail

No refunds on the last working day of the month.

With manual refunds there is no audit trail/data in the system.

Multiple invoices in one refund and difficult to see in one place.

Access DBs and Excel spreadsheets are used to track manually instead of the system tracking special credits.

Steps required for the approval process is cumbersome and requires some manual notification to management.

Return checks, SOL, and lost or stolen affidavit of warrant process requires research before the process can be completed in Revenue Accounting, which requires coordination between process areas.

Unable to reprint a credit notice.

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5.10 Cash Management (CM)

Paper Payment

Cash Management is responsible for processing payments from taxpayers. Their responsibility is to log incoming payments, batch documents, deposit funds, and forward the batched documentation to TAA for the posting payments to taxpayer accounts. Once processed, the amount of money applied to taxpayer accounts must match to what was originally received and deposited. Their workload is driven from incoming mail in the form of tax returns, remittance memos (RM's), invoices, audit schedules, taxpayer letters, envelopes and checks.

Received Mail

When mail is received it is opened. The mail is sorted between mail with checks and non-money mail. Mails with checks are advanced to the logging station so the check can be recorded. Non-money mail is date stamped and put in the outgoing mail

Check Logging

The checks are logged into the Revenue Receipting System (RRS), Cash Management Check log. The checks logged into the Revenue Receipting System (RRS) indicate that the money has been received. CM confirms that the information on the check (e.g., written dollar amount and numerical amount) and that the Payee is the DOR. Once the check is logged, the RRS assigns the entry a unique transaction number (beginning January 2013, CM will discontinue using RRS and begin using a new IS-developed check logging system).

At times money mail comes in with the documentation not matching up with the payment, or the reason for the payment is uncertain. CM performs research to determine the reason for payment. CM will print related documentation (e.g., invoice, remittance document) that shows the reason for payment.

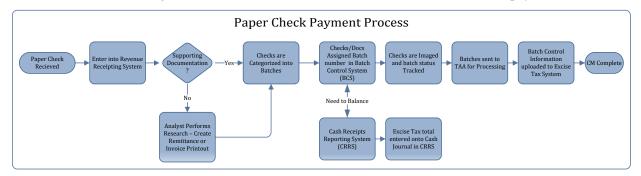


Figure 5-9: Paper Check Process Flow

In situations where the payment cannot be resolved, the payment can be deposited as a miscellaneous credit to taxpayer's account or deposited directly into a suspense account for further research. If the payee on the check is wrong, but the remittance and amount are correct, the check is deposited with DOR's endorsement on the check.

After the check is logged, the money mail is then distributed amongst CM employees. CM creates payment batches by tax type. The payment batches are assorted into batch sizes of 35- by job assignment 75 documents. Individual calculator tapes are made for the check and document totals of the batch. Once the two tapes balance, the checks are removed from the documents and bundled up together. The batch information is saved in the Batch Control System (BCS). The total dollar amount for the batch and the number of documents in the batch are entered into the batch header information. The batch identification is created and a four digit batch number is assigned. A batch sheet is printed and placed on top of the

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batch. The batch is then rubber banded together.

The batch along with the bundle of checks is taken over to the check scanning station for deposit. The checks are scanned and are balanced to the batch total. The checks are then deposited electronically via and Image Cash Letter file (ICL). The batch is forwarded up to TAA ICAP for imaging.

To balance to the checks deposited electronically, Cash Management pulls several reports. The CJ Summary, Daily Deposit Report, Miscellaneous, and Cash Management Control Book Reports are pulled from the BCS. The reports are compared and balanced. Once the reports are in balance CM logs into the Cash Receipt reporting System (CRRS). A cash journal is created to send the Office of State Treasurer (OST) and A8 (A8 is the official form to record the deposits with OST) and the deposit data to AFRS. Amounts are entered into the cash journal by tax type and fund per what was deposited in the BCS.

After the cash journal is created it is compared to the BCS data for accuracy. Once verified the cash journal is sent electronically to OST and to AFRS.

Lockbox - Use Tax only

US Bank compares the amount on the check to the amount on the remittance memo, balance due notice, or Use Tax return. If the totals of the check and document match, US Bank batches the document and deposits the check. The next business day the batched documents are sent to Cash Management, which sends the documents to TAA for imaging.

If the check and document totals are different, US Bank sends the check and documents to Cash Management for handling. CM researches the payment and deposits the check.

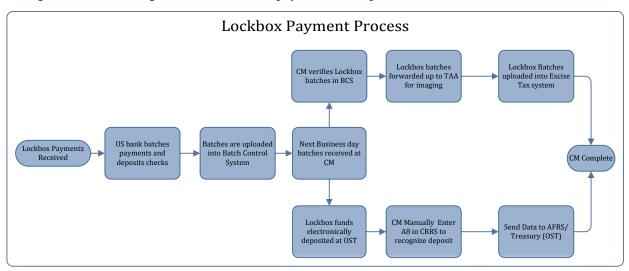


Figure 5-10: Lockbox Process Flow

Electronic Payments

Credit Card

Credit card payments are performed by a third party, Official Payments Corporation (OPAY). Taxpayer's are charged transaction fee by OPAY for making the credit card payment. Beginning February 2013 Visa Debit payments will be accepted.

Cash Management pulls a bank card report from OST's Treasury Management System (TM\$) displaying

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the credit card settlement totals received for the current day. CM accesses Excel formatted transactions reports provided by OPAY to assist in identifying and balancing credit card totals.

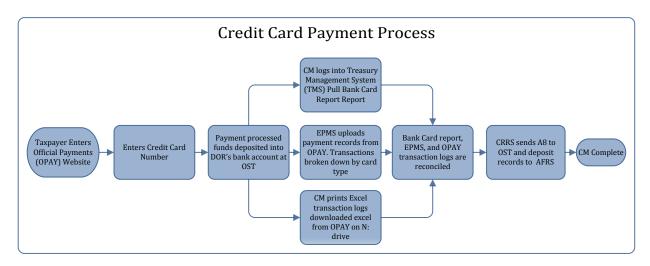


Figure 5-11: Credit Card Process

CM staff access the online Electronic Payment Management System (EPMS) to view credit card payment records uploaded for the current day. They compare the credit card totals to the amounts deposited at OST and against the Excel reports. At times they may need to make adjustments due to the time lag differential of receiving the payment records before the settlement and vice versa

Once the reports and the EPMS System are in balance CM logs into the CRRS. A credit card cash journal is created to send OST an A8 and the deposit data to AFRS. Amounts are populated into the cash journal by tax type totals in EPMS.

The payment records are uploaded from EPMS into the ET System to post to taxpayer's accounts.

ACH Credit Payments:

ACH Credit and Fed-Wire payments are originated by the taxpayer. The taxpayer instructs their bank to send money electronically to DOR's bank account at OST. DOR uploads the payments received throughout the day from OST into EPMS. An email notification displaying the total uploaded into EPMS is generated and sent to CM. CM compares the emailed totals to the amount uploaded into EPMS. CM logs into the CRRS. An ACH Credit cash journal is created to send OST an A8 and deposit data to AFRS. Amounts are populated into the cash journal by the tax type totals in EPMS.

The payment records are uploaded from EPMS into the ET System to post to taxpayer's accounts.

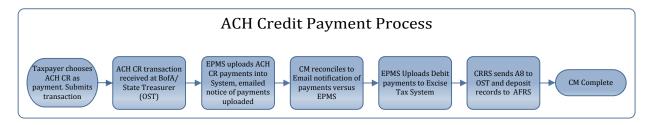


Figure 5-12: ACH Credit Process

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ACH Debit Payments (including E-Checks):

IS creates a debit file daily. This debit file is sent to OST. OST validates the debit file and passes the file to Bank of America. Bank of America again validates the file on their end. The next banking day Bank of America goes into the designated bank accounts and debits the taxpayer's account and credits DOR's account. CM verifies the ACH Debit total in EPMS versus the debit file total.

CM logs into the CRRS. An ACH Debit cash journal is created to send the OST an A8 and the deposit data to AFRS. Amounts are populated into the cash journal by tax type totals in EPMS.

The payment records are uploaded from EPMS into the ET System to post onto taxpayer's accounts.

If a debit payment is returned (Example Reasons: NSF, Invalid Account Number, Unable to locate account), CM sends a negative A8 through the CRRS to OST & AFRS to account for the loss of funds. A Debit Return Items report posts to EPMS daily. TAA manually removes the payment from the taxpayer's account.

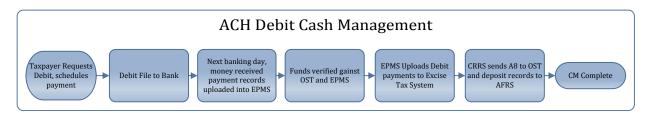


Figure 5-13: ACH Debit Process

PAYMENT CHALLENGES	Opportunities
User must enter A-8 information manually. This can cause errors to funds, and to agencies that depend on those funds. These errors can be mission critical depending on the receiving agency.	A new Core Tax System Replacement would auto- populate information from the system once it is logged.
Manual validation is required when checking the log against the deposit. This is a cumbersome manual process.	A new Core Tax System Replacement would automatically validate and populate documents.
The system scans the paper check and supporting documents separately. If they could be scanned together it would save time and lower errors.	A robust scanning system would allow for improved document traceability.
Some batch types could be batched together, but the system does not allow it.	A new Core Tax System Replacement would be flexible and allow consolidation wherever possible.
Reconciliation processes are manual and cumbersome to the user.	Automated reconciling will allow user to validate instead of manually reconciling.

5.11 ECMS

The ECMS provides an integrated system to identify, track and record tax discovery cases and dollars collected by the Tax Discovery Program. It is the primary system used by Compliance Tax Discovery for tracking dollars collected. It links to TARIS, ET, BRMS, ACS, and Audit Selection,

It displays an indicator in the TANDEM screens so other divisions know there is an active ECMS case.

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Users enter cases manually and link to Assessments, Warrants, and Excise or Use Tax Returns for which they receive dollar credit. EMCS then calculates payments automatically as they are received and posted to TARIS or the ET system.

It uses the BRMS system for calculating follow up periods. Money is also calculated automatically when payments are received during the follow up periods. This eliminates the need for the agent to manually check when money is received and calculate it and ensures better accuracy.

ECMS CHALLENGES

Manual linking from system to system.

Most of the information is this system is a duplicate of what is maintained in other systems.

Difficult to add new tax programs to this system as they are created –they are listed as misc. or other. This requires a new tax type and a service request to make the change.

An individual with a personal account & business account cannot be linked together and only 1 can be searched. There is a search feature that allows a search by name.

The system is cumbersome and not user friendly.

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5.12 Audit Selection and Case Management

The goal of the Audit Division is to contact 3.5 % of the tax base with 2.5 % of that contact occurring through audit enforcement activity. The remaining 1% is expected to be performed through taxpayer outreach and education.

Audit Selection

When it comes down to selecting audits, the goal is to select the most productive audits possible. The sources of Audit candidates come from the Data Warehouse, the Top 1,000 taxpayer list, recurring audits, new businesses, ad hoc reports, and manager referrals. Audit also exchanges information with ESD and Labor and Industries (LNI), by placing a file in a shared network location, to provide audit leads or businesses that have had their license revoked. There's also referral and fraud websites, as well as a call center where the public can refer audit leads. The Audit division also generates leads using Internal Revenue Service (IRS) information, but this poses challenges as the IRS uses SSN/FEIN and DOR uses the UBI number. Audit will try to match on name and address which is not always perfect. DOR is also cognizant of the strict guidelines around IRS' Pub 1075 compliance guidelines which sometimes deter folks from utilizing the data.

In this instance, Audit selection is performed by the Audit Management team. Managers are responsible for identifying and assigning audits to the auditor and they take advantage of the data warehouse to support their queries. Standard quarterly audit selection programs run against the data warehouse that utilizes pre-determined selection criteria to pull down large sets of raw data. These criteria evolve as auditors and managers modify and improve their selection criteria.

DOR has several sources of information available within the data warehouse including, but not limited to:

- Federal and State tax returns
- ESD information
- L&I information
- Contractor licenses

The quarterly program that runs against the warehouse pulls as much information as possible and loads it into an Access DB (the Audit Plan DB). It takes manual effort to get the results set from the data warehouse into a text format that can be loaded to the Access DB. The Audit Program support staff is responsible for summarizing the information at the account level (e.g., account summary) and then Audit Managers use the data to identify which leads to assign to Auditors. An Open Database Connectivity (ODBC) connection from the Access DB to TARIS pulls in the financial information necessary to support these programs. Other data sources loaded into the Access DB include building permits from the Construction Activity Network System (not currently part of the warehouse).

Audit Tracking from Source List

For audit lead tracking purposes, the division only tracks the high level selection source categories for each audit selected (such as statistical, limited scope, random sample, new business, unregistered, etc.). For the Audit Selection Ideas Data Warehouse reports, there's a spreadsheet where Audit maintains Audit Selection ideas which include a series of reports that filter the raw data from the data warehouse in multiple ways and put it into an Excel spreadsheet. Pivot tables are created so that the auditors can look at the information in summary format (e.g., by district). From this list the Manager will enter TANDEM, perform high-level research, and manually set the audit flag and assign to an auditor. There is currently no automated way to track the outcome of the audit from that specific lead set. Other "cradle to grave reports" from Tax Assessment Tracking System (TATS) provides the ability for Audit to track the

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success of an audit by reason code.

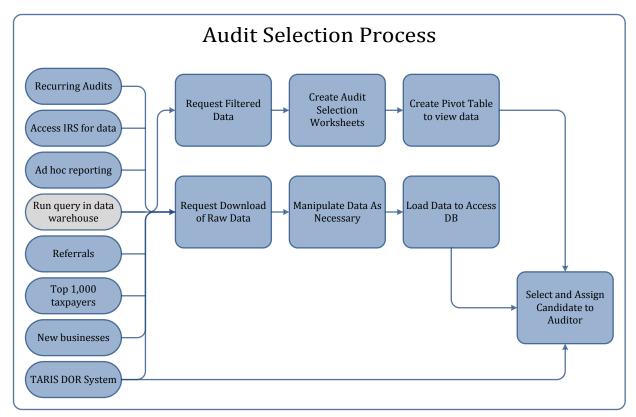


Figure 0-14: Audit Selection Process

Assign Account for Audit

- FAM selects Account
- Uses Transcript system to place audit flag on the account

Conducting the Audit

The process starts with an Auditor pulling an account for Audit that has been assigned to them by their manager.

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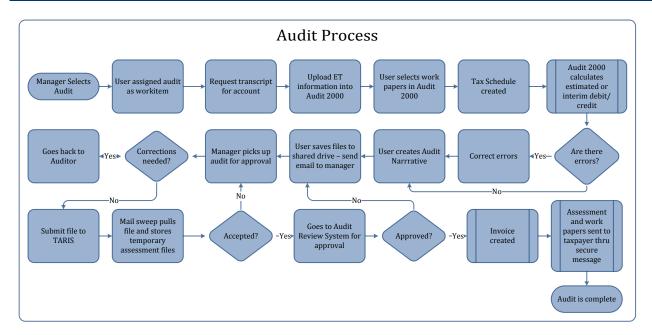


Figure 5-15: Audit Process

The user enters the TANDEM System to request a transcript of the account. The transcript is downloaded and created in the MS Windows Notepad. This file is then converted to an Excel format and uploaded into the workbook application, Audit 2000.

Audit 2000 is maintained by the audit program staff. They maintain and are support for the program. The period for an audit is up to four years plus current year (statute allow for longer if evasion or unremitted sales tax). This history populates the workbook.

The system has a custom ribbon that has quick buttons to the different sheets and actions of the workbook. This application also includes work-papers that the Auditor uses for the audit process. The Auditor then interacts with the Audit 2000 application while performing the audit. Once the audit is compiled, a summary of the information is created for the user.

Tax schedules are created and the workbook calculates the estimated or interim debit or credit. The workbook then runs Macros that check accuracy and will show edits that require correction by the user.

An audit narrative is created that includes text that will be sent to the taxpayer. The audit narrative template allows users to select paragraphs to populate the template, as well as variable fields that are required prior to the final text. This template consists of 300 paragraphs that can be selected by the user.

Audit Assessment Submission and Review

Once the audit is complete, the workbook and narrative files are saved to a shared drive for the manager's review.

- The manager reviews the file and approves it by submitting the file to TARIS.
- This process removes sheets from the workbook temporarily and is copied to a folder on the server.

The mail agent sweeps the file every ten (10) minutes and extracts the data elements from the file. The data is stored on the TANDEM mainframe for the assessment. Once accepted the manager receives an email confirming the receipt of the data.

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- If the file is not accepted it may require corrections so it can be resubmitted.
- Once the file is ready for review the manager notifies headquarters via email notification.

The Audit Standards and Procedures (ASP) unit reviews the audit and uses the ARS to access the data for the audit. The ASP unit adds interest and penalties if necessary and identifies any issues with the assessment.

Once the assessment is issued it is posted to the taxpayer's account and an invoice is created in TARIS or a credit in CRMS. At this point the files are:

- Removed from the temporary assessment folder.
- Mailed to the taxpayer with copies of the audit and backup documentation.
- Then sent to the taxpayer through secure messaging in "MyAccount" web portal feature. It can also be sent by USPS mail.

This unit also uses an Access database called MARIO which tracks all audits processed through AS&P, which Auditors are working them, and how long they have been assigned. This entry is manual and cumbersome, but necessary to track the status of audits assigned.

Public Works Contract Clearances

Public Agencies (PA) in Washington have to withhold 5% (retainage) from all construction projects. The PA will release the held monies after receiving release certificates from three state agencies (DOR/LNI/ESD). DOR receives a Notice of Completion form from the PA at the conclusion of the project. DOR sends the contractor a supplemental return (Reconciliation of Taxes) to show that all the taxes have been paid on the job. Once the return has been complete and any additional amounts have been paid, DOR can issue our release certificate to the PA. If the contractor does not pay the liabilities outstanding, DOR can file a lien against retainage to apply against owed amounts. The tracking of this work is done in an Access database.

Revenue Clearance Certificate

The Secretary of State (SOS) requires a clearance certificate from DOR for corporations looking to dissolve. DOR receives Revenue Clearance applications from corporations looking to dissolve. DOR reviews account to see if it's under audit, has outstanding returns/liabilities, or is out of state – due to nexus rules. If no issues, DOR issues a revenue clearance certificate so the company can proceed with dissolving through SOS. The tracking of this work is done in an Access database.

Construction Activity Network System (CANS)

CANS is a small side application to view information on building permits and public works projects by contractors throughout the state. DOR purchases some building permits consolidated from multiple counties/cities. We also input public works projects and federal/city/county permits provided by other agencies. Application supported by I.S. and data inputted by Audit division.

Reporting and Tracking

RA1 Hold Monthly Report

Another report generated by Audit uses the ODBC connection from an Access DB to TANDEM to determine which invoices DOR has issued that are on RA1 (system code) hold. These holds stop any additional penalties from accruing so that additional adjustments can be made. The report is run once a month to identify what's on hold. The download to the Access DB occurs and an email is generated to each of the mangers via Excel to ask what the status is of the hold. Each manager responds back by manually typing in the Excel spreadsheet and uploading it back to the same database.

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Use of ECMS

ECMS is mainly used by Audit, Compliance and TAA for Tax Discovery for unregistered businesses. Audit will also use it to perform ad hoc reporting on inventories assigned to auditors.

TATS

TATS is primarily the database where the Audit Division tracks auditor productivity. TATS uses TARIS information to track audit productivity. TATS is utilized for reporting auditor and program performance.

Timesheet Breakdown

Auditors must manually enter the breakdown of the time spent on audits as well as leave on Excel spreadsheets for offline use. This information is used to report and gain statistics. It is also used to track performance. The Excel sheets are submitted to headquarters to be uploaded into an Access database at the end of each month.

Additional Tracking Systems and Databases

- 1. Refund Tracking System: Refund request data, such as allowed or disallowed amounts and dates, is captured in the audit workbook and exported to an Access DB.
- 2. Appeals Tracking System: Assessment data from audits that are the result of an appeal is exported to an Access DB.
- 3. Sample Tracking System: Information is tracked on every audit regarding the types of sampling performed and whether electronic data was received.

CHALLENGES	Opportunities
Audit utilizes several Access DBs and Excel spreadsheets to support their business process. The Access DBs are supported by the Audit Division.	The Audit related functionality must be part of the Core Tax System to take the reliance off of Access DBs and spreadsheets to support the business process.
The tracking of audits during the audit process is manual via the Auditor, MARIO, and ARS and it's difficult to know, at any given point, what the status of the audit is.	A new Core Tax System Replacement would provide the ability to assign and track the status of the audit with the ability to open up the audit details and review details.
From an audit selection perspective, a lot of time is spent performing manual reviews of audit leads and auditors don't know what kind of adjustment to expect until they work through the audit.	A new Core Tax System Replacement would provide the ability to automate the audit queries, provide robust data mining capabilities, compute expected audit results, and track performance of lead selection sets.
Audit selection is left to the managers who are very good, but having a team of auditors and managers creating lead selection criteria would be useful.	A new Core Tax System Replacement would take advantage of potential business process changes that could allow for team audit selection techniques.
The data warehouse is limited in its data sources and matching criteria.	A new Core Tax System Replacement would include a list of new data sources to be loaded to the data warehouse and phonetic name matching where only FEIN or SSN exist on the source.
The MARIO database has to be manually keyed.	A new Core Tax System Replacement would combine the features of the ARS and MARIO to

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	avoid double keying information in two systems.
Time distribution is a manual process.	If time distribution were automated and included in
	the system it would alleviate the need for manual
	process.
Files sent to imaging are not automated. Users have	A new Core Tax System Replacement may be built
to create files and drop them into a network drive	to allow for this process to be automated.
for ICAP to pick up the file.	
Audit review files are dropped into a shared drive	A new Core Tax System Replacement would allow
to be reviewed by management.	for automation of file transfers (FTP) or direct
	access from anywhere in the system removing the
	need to move files.
The transcript system is old and not user friendly. It	Integration of the transcript system would allow
is difficult to access data for reporting as well.	more flexibility.
The data warehouse does not allow for users to	A new Core Tax System Replacement would
perform detailed data analysis, quicker selection of	provide additional features to be able to search and
accounts, and data mining.	analyze data. This would allow the user to get
	information sooner and with more meaning.
Most of the Audit information going to taxpayers is	A new Core Tax System Replacement would
in paper form.	provide the capability to get information to
	taxpayers in an electronic format.

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5.13 Compliance Overview

Revenue Agents are responsible for working their queues on the ACS on TANDEM. Revenue Agents are responsible for issuing:

- Demand Letters
- Warrants
- Payment Plans
- NOWDs
- License Revocation

The systems used by the compliance group are:

- ACS
- TAA
- E-Withhold
- EPPA
- ECMS
- LINUS
- TAXIS
- MLS
- SOS
- PACER (for bankruptcy information).

Assigned Work

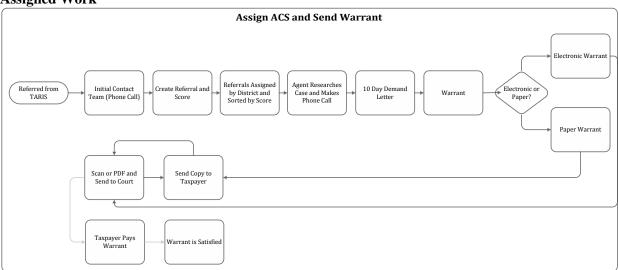


Figure 0-16: Compliance Assigned Work

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Referral Assignment

Revenue Agents work referrals for delinquent taxpayers in their assigned Region/District/Sub-district (RDS) work queues. Work items are dispersed to Revenue Agents based on their level of experience and the complexity of the account.

The Revenue Agent uses the next action date and the tickler capability to follow up on actions:

- Contact is with a letter or phone call to the taxpayer
- Research can be necessary before calls are made to taxpayers

Out of state accounts can be challenging because it may take several calls to the taxpayer to determine the point of contact and the Revenue Agent will look in IDOCS for the images of checks to determine who signs the checks to find a point of contact.

Payment processing

Recent changes to the cash management process have greatly improved the process of posting payments. The Revenue Agent receives back up documentation that is typically attached to a payment when it is sent. The checks are photocopied and a copy is provided to the Revenue Agent and the check is sent to process and sent to cash management. The Revenue Agent can pull the image of the check (front and back) when necessary after the payment has been processed in Cash Management.

DVI

In the work queues for the Revenue Agents there is a Dollar Value Indicator (DVI) populated with a number. The higher the number (7-9) indicates the potential revenue that can be collected. These accounts are usually worked first.

Account Sorting

Once the accounts are sorted by zip code, the referral will be randomly assigned to Revenue Agents in the RDS. Each account is given a score based on history of referrals, average tax return, and tax type (e.g., retail sales have a higher score than services). The volume assigned to each Revenue Agent varies based on the location of office or type of collection. Some Revenue Agents can get one hundred accounts while others may get forty accounts. These accounts stay in their work queue until the reason for referral is resolved.

Enforced Collection Process

While the revenue agent will see all tax periods, they can only enforce collection on those that are past due. They cannot start the enforced collection process for invoices until the period is 45 days past the due date, but an outstanding report can be included in an assessment once it passes the due date. They must attempt to contact the taxpayer to gain reports or payments. The first method of communication is through the Initial Contact Team (ICT). They call the taxpayer using a predictive dialer.

If after attempting to contact the taxpayer there is no payment or return submitted:

- A ten day demand letter is sent and an automated comment is posted to ACS
- An action date is determined to follow-up on the account and will remind the Revenue Agent to work the referral.
- If the taxpayer is not responding they may try calling again before proceeding with enforced collection.

Managing the Account

As part of working the account, the Revenue Agent will attempt to gain:

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- A payment in full
- Negotiate a payment plan
- Or identify address and asset information.

If the taxpayer is non-responsive, a warrant is the next step and will combine all invoices past due and create a new invoice in which to track payments against.

Warrants and Invoicing

- A new invoice pulls all of the debt and creates one invoice and old invoices are posted to the new invoice.
- The warrant is filed with the county of the referral.
- DOR is charged a fee to file the warrant and that fee is passed on to the taxpayer.
- They can satisfy a warrant once the payment has been made or they can vacate a warrant if they find it was filed in error.
- They can also update warrants to include additional debt.
- The information from the county court is returned electronically (for King and Pierce County) and includes the cause number and date filed.
- Warrants need to be "satisfied" if a payment has been received and the warrant is paid in full.
- Once the payment is made, a waiting period is needed depending on the method of payment (60 to 90 days).

Paper checks require more time because they have to clear the bank. Cashier's checks don't require a waiting period. Once that waiting period has been met, a work item is created for the satisfaction of the warrant. This is a paper or electronic process depending on the county where the warrant was filed.

If in paper form, the satisfaction must:

- Be notarized before it is printed
- Sent to the county of record.
- A copy of the satisfaction is sent to the taxpayer.

The documents are sent to IDOCS for imaging. The warrant fees are charged up front when the warrant is filed and they are passed on to the taxpayer.

Payment Plan Agreements

Revenue Agents are able to arrange payment plans for taxpayers. There are formal and informal agreements that can be prepared. Taxpayers can pay the liability in full or may have an informal payment plan that can be resolved in a very short timeframe (90 days or less).

The Revenue Agent has the ability to create the payment plan using an online form that allows data entry and printing of the plan. This is sent to the taxpayer for signature. The Revenue Agent uses the tickler features of the system to track these payments. For more formal agreements, a warrant must be issued and filed first.

The EPPA is created in the system (via macro) and can be tracked by the system. The taxpayer is required to complete a financial statement to negotiate the payments for the plan. The payments are made electronically from the taxpayer's bank account.

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EPPA Limitations

The EPPA process has limitations because the system will not allow more than one warrant invoice to be used, for a payment plan, at one time. The user must wait until the first warrant is completed before they can issue another plan. When an electronic payment goes NSF an automated ACS note is entered on the taxpayer's ACS note list.

Front Desk Warrant Responsibilities

The Front Desk staff files the following warrants to different counties:

- Original
- Amended
- Satisfied
- Vacated

E-file can only be done with King and Pierce Counties; otherwise it is filed by mail. Copies of original and amended warrants used for e-filing is accessed through TANDEM. Copies to file to other counties are submitted by the Revenue Agent. Abstract filing can only be done manually.

Satisfactions

Satisfactions that are being satisfied in King County can be printed from TANDEM. Some satisfactions that need to be filed with other counties can be produced using a satisfaction template form found in the intranet or through TANDEM.

Vacations

Vacations also have to be produced manually using the vacation template form found in the intranet. Once vacation and satisfactions are signed by a Manager and notarized by a front counter agent then it is ready for scanning and filing.

A copy of a satisfaction filed in another county can be printed from the TANDEM System; however it can cause manual work to get the satisfaction ready for a manager's review and signature. Once the satisfaction has been filed with the county, the satisfaction date is then entered in TARIS/TANDEM.

Outstanding Returns

Revenue Agents issue CAS out of the TARIS System which reads the OSR's from the OSR System.

Estimated Returns

The system:

- Estimates the tax due based on the amount of tax reported in the last 24 periods.
- Estimates are usually higher than the actual figures.
- TAA will manually create a return to post to ET when a CAS is paid off of an estimated return.

An Examiner may request that the Revenue Agent create the return using the Form Repository. ET system and TARIS CAS Invoice have to match up, so one or the other will need to be adjusted. The out of balance scenario between the two systems can occur in situations where the taxpayer:

- Didn't take their small business credit.
- There's been a rate change since they filed.
- An auto-adjustment to the account.

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For instance, there may be an auto adjustment that clears out ET and an exception report kicks out to see if there's a return that matches on ET. The TAA Warrant team is responsible for keeping the two systems in balance.

Uncollectable Accounts

Accounts can be deferred if it is determined that DOR will not be able to collect debt. The Revenue Agent must exhaust all means of collection prior to this action. Once an account is deferred it is no longer being collected.

- Warrants are still outstanding and do not expire until ten (10) years after the initial filing date so there is a possibility that some or all of the debt can be paid at some point.
- After twelve years, if no payment, the account can be written off as uncollectable.

License Revocation

Revenue Agents may also choose to revoke a taxpayer's business registration. The process is tracked and letters produced by the Regional Secretary. This requires several steps including:

- Brief adjudicative hearing.
- Opportunities for appeal.
- Physically going to the business to post a final order.
- Seizing cash or assets.
- Adding DOR to titles.
- Garnishing lottery winnings.

Once posted, it becomes a Class C Felony for the taxpayer to conduct business.

The division revokes ten to 15 accounts per month. There is a report that DOR shares with ESD that shows what registrations were revoked.

In some cases the taxpayer can open new corporations to avoid paying debt on old accounts. It would be an improvement to the system to auto-check for repeat offenders so they cannot incur new liability. A revoked taxpayer must pay in full their outstanding tax liability and in addition, post a cash bond, in order to reopen.

Correspondence

ACS has approximately 20 letters that they can choose to send to taxpayers. Printing the letters is still a manual process. Other than CAS and Tax Warrants all ACS letters are sent, but never imaged, because they are form letters, however, there is a record of them being sent.

The field offices scan tax warrants and can:

- print or send to the courts
- convert to a PDF format
- Send to the courts electronically
- Send to imaging.

A process improvement would be having documents auto-image without having to print and send.

CHALLENGES	OPPORTUNITIES
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Users must enter and use multiple systems to perform their work. This requires multiple screens opened at once and can be cumbersome to the user.	A new Core Tax System Replacement would provide a custom user interface to display all the required information and limit the number of systems that the user must access.
System screens are not user friendly and don't allow for word wrap or spell check. They do not provide for dropdown selections.	A new Core Tax System Replacement would allow for user friendly screens that provide more features to assist the user in performing their work.
If there are adjustments on an account they are not always transparent and can be difficult to research.	A new Core Tax System Replacement would provide the ability to show all account period details, adjustments, and how penalty, interest, and payments have been applied.
Automated comments and messages are cryptic and confusing.	A new Core Tax System Replacement would provide some fields to be user configurable which would allow more flexibility for system messages. It could also allow larger field lengths that will accommodate longer and more specific language to explain the action performed.
Invoice screens need improvement.	A new Core Tax System Replacement would allow for improved and informative screens for users.
Taxpayers are allowed to close a business with an outstanding liability and open a new business.	A new Core Tax System Replacement would flag taxpayers, or related taxpayers, who have outstanding liabilities so that Revenue Agents may better track that taxpayer during the first few months of business.
Although indicators exist across systems it is possible for an Auditor and a Revenue Agent to be contacting a taxpayer at the same time.	A new Core Tax System Replacement would provide the ability to minimize the potential for multiple divisions to be contacting a taxpayer.
Correspondence is maintained and managed out of multiple systems and accessing previously sent correspondence is inconsistent.	A new Core Tax System Replacement would provide a standard approach for storing templates, initiating correspondence, and viewing previously sent correspondence.
The Master Business Application (MBA) doesn't include a place for contact information.	Change the MBA to include that information.
The EPPA program only allows for one warrant on a payment plan agreement at a time	A new Core Tax System Replacement would allow for multiple warrants to be included.

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5.14 Compliance Initial Contact Team

The Initial Contact Team (ICT) conducts:

- Outgoing calls
- Receives incoming calls
- Performs skip-tracing
- Works a small number of accounts in their work queue that require more complex enforced compliance actions.

Calls for Outstanding Returns

Their top priority is outgoing calls for outstanding returns and receiving the steady stream of incoming calls especially during peak filing season for annuals. They also contact out of state accounts before the account is referred to a Revenue Agent. They have anywhere from 3,500 to 125,000 accounts assigned. In addition, the Region 11 totals can vary, depending on the time of year, between 20,000 and 45,000 accounts.

Software and Hardware

The ICT group uses Avaya software (and hardware) for incoming and outgoing calls. They just completed an upgrade that provides added functionality, most notably the ability to add the next action date so that the ICT group can provide more complete and accurate follow up calls on accounts assigned to the unit. Prior to this, the software would work through the list provided by IS and there was no easy way to start up where they left from the previous list. This results in some accounts not being contacted the first time through.

Staffing and Volume

From a staffing perspective ICT has 18 Revenue Agents on the dialer, two lead Revenue Agents and two managers. Agents are expected to have a minimum of:

- 5.5 hours of active call time per day
- 99 "connects" per day on new accounts
- 66 connects per day on older accounts that are permanently assigned to the work unit.
- An outbound call rate of 19 per hour when the dialer is running the new account lists.

For a specified amount of time each day they are also expected to:

- Perform skip-tracing
- Work through their work queue
- Issue warrants
- Perform other more complex enforcement actions

This is done in an effort to train the Agent in more complex case management techniques so that they may grow into the journey level Revenue Agent role by transferring out to a field office if desired.

Referred Accounts

The accounts that are referred to ICT are mostly outstanding returns. ICT doesn't typically work accounts that have TARIS invoices or those that are assigned to a Revenue Agent. Accounts received could be a habitual non-filer or it could be a new business. The accounts received are at least 2 weeks past due and accounts stay at the ICT for 4 weeks to 3 months depending on the dollar volume indicator (DVI) and reporting frequency of each account. ICT is referred delinquent accounts monthly, quarterly and annually.

During their time off the dialer each day, Agents are also expected to work their more complex cases or

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perform skip-tracing. For skip-tracing the user uses:

- Accurint (both individual look up and bulk skip-tracing as part of special projects)
- Whitepages
- Google
- ESD
- LNI

New Accounts

Accounts are sent to the dialer through lists which are generated from the TANDEM system by IS. List 1 contains the newly referred accounts, many of which will go onto the field if not collected by ICT, and several other lists which contain older accounts which are permanently assigned to ICT.

Older Accounts

The accounts that are permanently assigned to ICT are broken down by annual and quarterly reporting frequencies. ICT claims 100% of the dollars collected and the fiscal goal is \$2.5 million, however this money is not part of the cash commitment for the unit.

Use of TARIS

From a system perspective, when calls are made, notes are automatically added to ACS if the dialer leaves an automated message; otherwise the Agent will enter the note regarding the outcome of that call.

If they are unable to get through to the taxpayer, the agent will try to find another number for that taxpayer. When an outgoing call connects, the Avaya software will populate ACS and the Agent then goes to ET to get the full summary of the account. They'll also look at the notepads.

When working with the taxpayer the Agents try to get them to pay in full and encourage them to make payments through "My Account". If the taxpayer makes a partial payment, requests a payment agreement or requests that the penalty be waived then the account will go to a Revenue Agent during the normal referral process.

CHALLENGES	OPPORTUNITIES
It is difficult to show account reconciliation. Taxpayer's ask for an invoice and the Agent will take multiple screenshots, paste them to a sheet of paper, photocopy and highlight the key lines for the	A new Core Tax System Replacement would provide the ability to show an invoice that the taxpayer can understand.
taxpayer to look at. They also "white out" the amount paid and balance due to make a clean copy for the taxpayer, so as not to confuse the taxpayer that the periods has been resolved.	
Penalty and Interest is not broken down by type or date. Taxpayer's are surprised when the penalty can be 60% of the balance due when an account has had a CAS and warrant issued.	A new Core Tax System Replacement would be able to provide an invoice that shows the penalty and interest breakdown by type, amount, and date.
When showing the total tax due and any credits, there's no subtotal to show that they only owe the total tax minus the credit. (This is an issue for the agents looking at the 201 screen – they have to pull out the calculator to adjust a CAS since they have to subtract the Small Business Credit (SBC)	A Core Tax System Replacement would provide the total tax due after the SBC for each period in an easy to read format.

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manually.	
If the phone number on BRMS isn't a good phone	A Core Tax System Replacement would provide a
number the agent searches return information on IDOCS (Client Work Manager) for a better phone	consolidated list of all known phone numbers and remove the need for the Agent to search IDOCS
number.	manually.
TANDEM is not user friendly in that it doesn't	A new Core Tax System Replacement would
provide spell check and word wrap on the notes	provide more user friendly functions such as word
screens.	wrap.
Information received via Secure Messaging needs to be copied into TANDEM note screens.	A new Core Tax System Replacement would provide the ability to have consolidated taxpayer
•	notes.
Reports are manually created via an extract from	A new Core Tax System Replacement would
the dialer database to track inbound call wait times.	provide the ability to run reports without having to manually extract and create.
	manually extract and create.

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5.15 Compliance Review Recovery Team (CRRT)

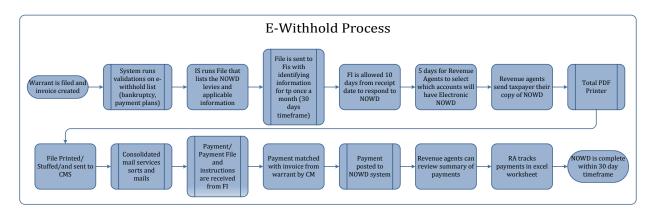


Figure 5-17: E-Withhold Process

E-Withhold Process

DOR serves lists of levies to Financial Institutions (FIs) through electronic means. The E-Withhold System allows Revenue Agents to select assets/accounts reported by the FIs for inclusion in the E-Withhold process. An electronic file is created containing the list of Notice to Withhold and Deliver (NOWD) levies for taxpayer accounts.

This file is served to FIs once per month. There are accounts that are excluded in the process and can be because of bankruptcy or payment plans.

The system runs these validations before creating the file. The IS Division runs the job to create the file. It's ultimately the responsibility of the Revenue Agent to determine which levies are included in the list.

Exchanges

The file is sent to the FIs with information to aid in the identification of the taxpayer. This information, at the least, will include a numeric indicator such as an FEIN or SSN. Other items are taxpayer names and legal information.

To serve the file to FIs, the system provides the means to schedule the job. The job is run monthly and some banks participate monthly, bi-monthly, or quarterly. The FI is allowed ten (10) days to respond to and complete the first two steps of service. Their response is to be electronic through files back to the agency.

There are six (6) programs that run throughout the day:

- Two (2) files are sent to the FIs.
- Four processing jobs that pick up files from the FI for processing.

DOR supports:

- three (3) file formats for the initial inquiry file
- two (2) file formats for the revised withhold file.

For FIs unable to automate their internal processes, the file can be sent in the Excel spreadsheet format. DOR's system is able to process all supported file formats including the Excel spreadsheet in the

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automated process. Once the responses are back, the Revenue Agents assigned to the taxpayer accounts have five (5) business days to review the files and decide which orders will be completed and which will be pulled from the process due to other arrangements made with the taxpayer.

Processing Payments

When the payments are received from the FIs they are either ACH credit transactions or check payments. ACH credit is the preferred method, but only represents 52% of the FIs subject to E-Withhold (presently 112 FIs). The other 48% of payments are via paper checks.

Payments are typically one check/payment per payment file. In other words, this can include multiple transactions for multiple taxpayers. Cash Management reviews the payment file total against the total funds received to ensure they reconcile and then verifies the file within the system. Payments are applied through the automated process.

Tracking

The CRRT Revenue Agent uses an Excel spreadsheet to track payments manually. There are service requests in process to automate that process.

Maintenance and Research

The Revenue Agent in CRRT can drill down into the details of the system research actions performed in the system. They can also sort by column headers. They can view service by month or by FI.

FIs are allowed a mitigation process to help them be compliant in this process. They can request other ways to receive the file. The file can be too large for them to take and they will ask that only their county be included in the file. They can also ask that the data and order of data mirror that of other processes they already perform (e.g., Financial Institution Data Match).

The CRRT Revenue Agent is responsible for training the institutions and the mitigation process.

Correspondence

Once the information is verified by Cash Management, Revenue Agents can see a summary from one (1) payment/data file to view to which accounts the payment has been posted. Taxpayer notification letters are sent by CRRT to tell them the NOWD has been served to their FI. The FI can hold the funds up to the 30th day of service to allow the taxpayer the opportunity to call their assigned Revenue Agent to make other arrangements for payment.

The CRRT Revenue Agent has multiple tracking reports that they currently utilize through Excel spreadsheets that are manually populated.

The file that is generated to go to the FIs is also used to generate correspondence to the taxpayer and is processed through the Total PDF Printer program (freeware). This allows the CRRT Revenue Agent the ability to print all of the taxpayer NOWD copies at once. Letters are sent to the CRRT printer, and processed with CRRT's stuffing, sorting and folding machine. These notification letters are sent through Consolidated Mail Service.

The CRRT has submitted a service request for the taxpayer notification letters to include multiple warrants in a one-page notification letter per account.

The overall process is setup for invoices. This allows the users to identify the warrant and invoice to which it will be posted.

CHALLENGES	OPPORTUNITIES
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There is no simple way within the system to	IS is in the process of adding features to allow this.
query data for reporting statistics.	
The E-withhold system is a subsystem and not	A new system will allow for replacement or
integrated into the Core Tax System.	improved integration.

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5.16 Compliance Bankruptcy

The Bankruptcy group is made up of five agents and one supervisor. Bankruptcy information is received through a daily download from the Federal Bankruptcy Courts (via the standard EDI program) and loaded to an Access DB.

Data Load to Access DB

As part of the data load process, accounts are matched with information on BRMS to determine which bankruptcy filers are registered, or potentially registered, as taxpayers with DOR. The information loaded to the Access DB includes:

- 341 information (including judges and trustee information).
- Discharge
- Dismissal
- Asset information

An opportunity exists to automatically import the information into TARIS, but there is still some concern that a percentage of accounts still need manual review to confirm that the information is getting matched correctly.

When initially loaded to the Access DB, information automatically goes into two work queues, one for Chapter 11 and 13 and another for Chapter 7.

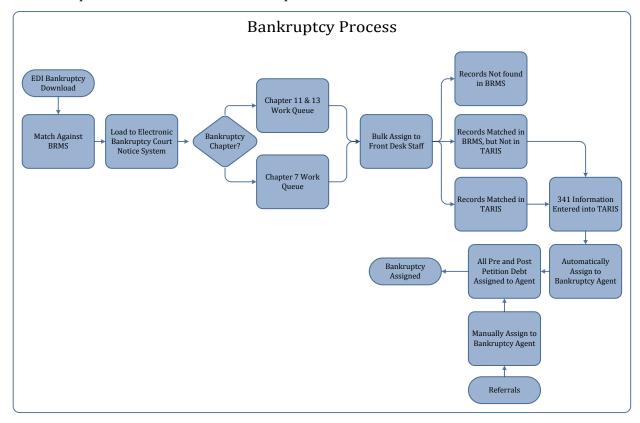


Figure 5-18: Bankruptcy Load Data to Access DB

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Working the Access DB Queues

Each morning the Supervisor in the Bankruptcy group enters into the Access DB to bulk assign accounts to the Front Desk Staff who manually enter the bankruptcy information into TARIS. This could include:

- New bankruptcies (341s)
- Discharges
- Dismissals

The Front Desk Staff work three (3) inventories in the Access DB to clear the accounts. From these two work queues, the Front Desk staff work the accounts by manually entering the information into TARIS.

There are three inventories that the matched records will load to base on whether or not they match existing BRMS information. The bankruptcy record will:

- Go to the first queue if it matches on all five (5) match criteria (e.g., UBI, name, address, etc.).
- Go to a second queue if it only matches four (4) of the five (5).
- Otherwise it goes to a third queue.

If the taxpayer is not in BRMS the information does not get loaded.

Assigning on ACS

Once the accounts have been worked out of the Access DB they're ready for assignment in ACS. Cases are randomly assigned to the Agents within the Bankruptcy group. The Agent owns both the pre and postpetition debt until it is discharged or dismissed.

If an agent doesn't pull the case it's possible that it could be assigned to another Revenue Agent. An opportunity exists to ensure that ACS cases with bankruptcy information are automatically assigned to a bankruptcy user. Once in bankruptcy it's considered part of mainstream compliance.

As part of working the account, agents look up bankruptcy information in PACER (Western Washington .08 cents per look up).

Bankruptcy Information

The Bankruptcy group uses the TANDEM screens to enter the initial bankruptcy information, proof of claim date, etc. Once the bankruptcy information has been entered an indicator is placed on BRMS to inform other divisions that there's an active bankruptcy for the taxpayer.

Other divisions should also be looking at the TANDEM screens which will show any closed bankruptcy case. This is important in instances where an Auditor might be auditing a taxpayer who was previously in bankruptcy.

Referrals from Other Divisions

The Bankruptcy unit will also get information, via email, from Task Discovery, Mainstream, L&I, ESD, or Attorney General (AG) if they happen to have missed the bankruptcy filing on the EDI download (this occurs a small percentage of the time – i.e., less than one half of one percent). This could have been missed due to the name not matching on the filter or because the taxpayer wasn't registered in BRMS at the time the EDI File was received. An example may be a corporate officer who files Chapter 13. There is an opportunity to have better access to SOS information.

Issuing the Proof of Claim

The proof of claim is generated from a template on the network. There's some information that's prefilled, but the user must fill in the rest. Once they're done they print and send to the bankruptcy court.

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A copy is kept in a paper file, but not imaged on IDOCS until the bankruptcy is resolved, at which point the agent will send the entire bankruptcy package to imaging to be scanned. There's also a place on the history screen in TARIS where the user can enter the proof of claim amount.

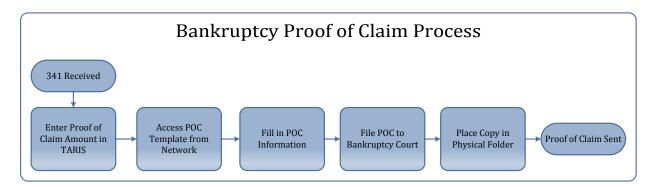


Figure 5-19: Proof of Claim Process

Mid-Month Filing

If the taxpayer files for bankruptcy in the middle of the month, and the taxpayer E-files, they must file one return (for the pre and post-petition period), but only pay the post-petition amount. This requires the agent to perform a manual adjustment in TARIS on the backend to account for the pre and post-petition debt.

Discharges, Dismissals, and Trustee Payments

For Discharges, the user takes the docket date for discharge and enters it into the end date field with an 'A' indicator which will essentially close out the bankruptcy. The user will enter a 'B' indictor for a dismissal.

When applying payments manually, penalties must be waived. There are certain system limitations that make it difficult for the Bankruptcy group to manage the payments and present them logically to attorneys in order to show what was paid. Bankruptcy taxpayers are only responsible for the tax due, not the penalty and interest, but the system applies payments to penalty and interest first. This is why penalty waivers are required for bankruptcy.

For instance, the account must zero out and to do that the user must waive penalty and interest. When this occurs it looks as though the taxpayer overpaid and an Automated Return Adjustment (ART) is generated sending an invoice out of TARIS for the additional interest remaining. The Agent must create multiple screenshots from ET and TARIS to explain to the attorney what happened and it can be difficult to show what's on the system.

Because of this the Bankruptcy group uses the same Excel spreadsheet that the Warrant Team uses to perform the account reconciliation to show how payments were applied. This can take several hours. There is an opportunity to automate the penalty waiver process and include a form and an approval process by the Bankruptcy Manager.

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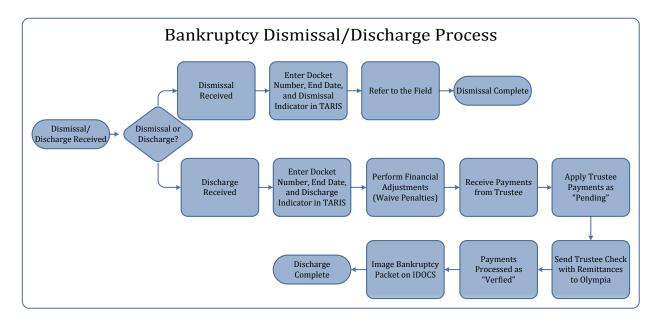


Figure 5-20: Bankruptcy Discharge, Dismissal and Trustee Payments Process

Processing Trustee checks require the payments to be processed across multiple taxpayers. Those payments will remain in a pending status until the check has been deposited, which can sometimes take several days (i.e., if it falls over a weekend).

Bankruptcy will apply the payments and then send a stack of Remittances and the check to Cash Management to be processed. There is an opportunity to speed up the timing of when payments are deposited.

Adjustments on TANDEM

Adjustments to Face for Bankruptcy (AFB) are also made on TARIS and this could also be automated. Requests for amounts to be written off (e.g., B&O) require an email to TAA and there's no transaction that indicates why it was written off.

The TAA Examiner needs to enter the information into a notes field. This also makes it difficult to explain to the attorney why it was written off. The attorney may ask for money back thinking their taxpayer overpaid. Small balance write-offs require similar adjustments.

The Bankruptcy group would like to be able to write these off and then pull them back in if the taxpayer doesn't come back into bankruptcy. Sometimes adjustments might require data fixes, but the DOR doesn't like to do this because there's no audit trail for what happened on the account.

CHALLENGES	OPPORTUNITIES
Information from the bankruptcy courts is manually added to TARIS.	A new Core Tax System Replacement would provide the opportunity to automatically load federal bankruptcy information directly to TARIS.
	Opportunity exists to ensure that ACS cases with bankruptcy information are automatically assigned to a bankruptcy user.

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Users go to the 446 screen to see any bankruptcy information, but they should also go to the 404 screen to see the history.	A new Core Tax System Replacement would show the bankruptcy indicator on a taxpayer (both open and closed) no matter where the user is within the application.
A corporate officer may file for bankruptcy, but may not match the Access DB records as the corporate officer is not registered separately.	A new Core Tax System Replacement would provide better access to SOS information would allow for improved matching.
The Proof of Claim is generated manually from a template on the network and isn't imaged until the end of the bankruptcy.	A new Core Tax System Replacement would allow for automation of the Proof of Claim with the ability to generate and view the Proof of Claim from within the case.
Penalty Waivers are manual and don't provide the details necessary to show an attorney what was paid. Penalty Waivers occur via an email request.	A new Core Tax System Replacement would allow for automation and an approval process around the Penalty Waiver process.
Adjustments to tax don't provide the bankruptcy related details that would show an attorney what was adjusted. Adjustments occur via an email request.	Additional financial transaction types should be included that show the breakdown of what was adjusted and why.
Processing the trustee checks is manual and can take several days to get deposited from the field.	A new Core Tax System Replacement would allow the bankruptcy unit to deposit checks within 24 hours.
A taxpayer filing for bankruptcy in the middle of the filing period must file one return and pay the post-petition debt. This requires adjustments to be made manually on TARIS.	A new Core Tax System Replacement would provide the ability to process returns that include both pre and post-petition debt.

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5.17 Compliance Tax Discovery

Tax Discovery's role is to identify non-registered taxpayers. DOR has Tax Discovery units in Seattle, Bothell, Richland, Tumwater, Kent, Vancouver, Bellingham, Spokane, Yakima, Wenatchee, and Tacoma. Their work comes from multiple sources such as:

- Field Work (where they observe what's in stores, research of new and seasonal trends, trade shows, manufacturer's representatives),
- Hoovers and Corporate Affiliates,
- Fraud Referrals (Vessels, Washington State Patrol), and;
- Data Warehouse (few agents have access, but use it more to confirm information not specifically to develop leads).

In short, the Tax Discovery Agent is responsible for creating their own inventory and their performance measures are based on the amount of money collected and cases worked.

They use several tools to support their end-to-end business process. These include:

- ECMS
- TANDEM
- Data Warehouse
- Hoovers
- Physical Case File
- IDOCS
- Excel workbooks.

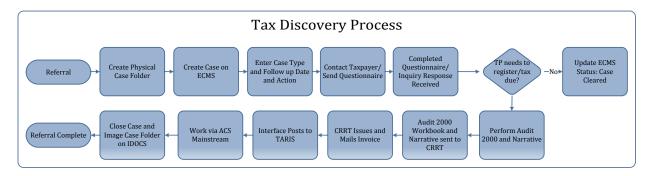


Figure 5-21: Tax Discovery

Create Case Folder

The process begins with identifying and reaching out to the potentially non-compliant taxpayer based on the sources listed above. The Agent will start by opening up a physical case folder (which will be imaged when the case is closed) and contacting the taxpayer to determine if they have a filing requirement. Sometimes this involves educating the taxpayer (more so for out of state) and walking the taxpayer through a series of questions.

The Agent will include information in the physical folder that indicates how the taxpayer was sourced.

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The Agent will also send a questionnaire to the taxpayer asking them to return it. Like most of the Tax Discovery related correspondence, the questionnaire is generated from the network and saved in the physical case folder.

If the Agent determines that the lead is a viable case to work then they will manually create a case on ECMS. As part of the case creation process, the Agent can indicate how the case was sourced, as well as enter a next action (i.e., follow up, phone call, or letter) and the next action date.

ECMS

From ECMS, the Agent can manage their inventory of cases to work. The work can be assigned to the Agent or bulk assigned to another Agent by a supervisor. From their inventory list the Agent can click on the Case ID to open up the details of the case. All data is manually entered and most of the information entered is in the form of notes. At this point the Agent will ask the taxpayer to register by filling out the registration form. When the taxpayer registers on BRMS the Agent can link the case, via UBI number, to BRMS which will show an indicator that there's something being worked on ECMS.

Other users of the TANDEM System must go to ECMS to see the details. Many times the Agents will enter notes into BRMS to contact the Agent prior to performing any action on this taxpayer. If the taxpayer does not register, the Agent can force register the taxpayer and generate an estimated assessment amount, but this is not preferred as it will likely get adjusted at a later point.

Conducting the Audit

As part of conducting the Tax Discovery, the Agent will use Audit 2000 program to calculate the taxpayer's liability. They will also include the Audit Narrative which will include the basis for assessment, statutory references, and future reporting instruction.

Once filled out, the Audit 2000 case and Audit Narrative is submitted for review and approval. When approved, it will follow the same audit assessment posting process on TARIS and the taxpayer will receive an invoice.

Once the invoice is generated out of TARIS, the Agent can link the ECMS case to the TARIS invoice which will track assessments and dollars collected. Within ECMS the user is managing the account and setting up their own next action date.

Once the taxpayer becomes a referral on ACS, the Agent will manage the account through ACS and essentially owns the account through closure. They follow the same mainstream process that the rest of the Compliance division follows.

Correspondence

All ECMS correspondence to the taxpayer is generated via templates on the network and stored in the physical case folder. Imaging them throughout the life of the case would result in those documents being imaged separately on IDOCS and difficult to identify. Because of this the Agent waits until the end and images the entire package together.

ACS correspondence functionality is launched from ACS screens and allows for a drop down list of templates for the user to choose from. The user can select which periods to include in the letter. When generated, the correspondence gets automatically imaged on IDOCS. The feature provides a calendar and due date and allows for the user to set the due date.

A similar program exists for CAS and warrants, which allows the user to launch the tool from TANDEM and provides the user with a list of templates to choose from and periods to include.

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Case Management

Once in ACS, Agents perform their work out of the ACS tickler queue and work it like any other mainstream case. Performance is based on dollars received and Agents get credit for the following year's taxes paid to DOR by that taxpayer. Agents can view their performance via the reports on ECMS, as well as reports for cases requiring clean up (e.g., ECMS cases not tied to a TARIS invoice).

Agents are responsible for closing out their own case. Other DOR-staff who are viewing the account in TANDEM are required to view information (e.g., notes) in both TANDEM and ECMS to understand what's happening with the case.

Excel Spreadsheets

Agents also keep Excel spreadsheets of businesses attending trade shows or expos and track the status of those leads (e.g., UBI number, name, contact, and how much they paid in tax) outside of the system. Promoters of these types of events are responsible for providing a list of all vendors and their UBI numbers. In response, the Tax Discovery group sends out paper forms, via a mail merge process, to the taxpayer to fill out after the event. This process also includes issuance of temporary UBIs so that the return can be processed. Some agents use the task manager capability in Outlook to set up reminders.

CHALLENGES	OPPORTUNITIES
Correspondence is not imaged until the end of the case as it would be difficult to locate on the correspondence on IDOCS if mixed in with other images for that taxpayer.	A new Core Tax System Replacement would provide the ability to categorize documents in a more meaningful way.
Tax Discovery Agents use ECMS, ACS, Data Warehouse, Outlook, and external spreadsheets to track their work. This can result in duplication of work and allows for errors to occur.	A new Core Tax System Replacement would provide the ability to consolidate systems into one system to that allows for all content to be tracked and accessible from that system.
The Data Warehouse is used for confirmation of information, not as a way to generate leads or reduce the amount of time spent researching potential leads.	A new Core Tax System Replacement would provide the ability to leverage available data sources that would allow Tax Discovery Agents to focus on high dollar non-registrant leads and reduce the time spent looking for leads.
ECMS correspondence is generated via templates located on the network.	A new Core Tax System Replacement would provide the ability to generate and view correspondence within the case similar to ACS and TARIS letters with delinquent accounts.
If the taxpayer wasn't set up on ECMS, there's no way for Tax Discovery Agents in the future to know that the lead was researched.	A new Core Tax System Replacement would provide the ability for users to view history, particularly for those taxpayers that didn't make it to ECMS. That Agent should be able to see the questionnaire and how the taxpayer responded.

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5.18 Front Desk

The Front Desk Tax Information Specialists (TIS) and Taxpayer Service Representatives (TSR) are responsible for incoming calls, incoming correspondence, and incoming taxpayers. The taxpayers who visit the Front Desk may have questions related to their BLA, their tax return, or to make a payment. The Front Desk TSR assists taxpayers personally or by telephone regarding their tax responsibility to DOR. TSRs can open accounts and issue UBI numbers for new businesses, assign filing frequency and collect applications fees. They also complete applications for additional licensing if required and update accounts as necessary. TSRs are also responsible for assisting taxpayers in declaring the amount of Use Tax waived on the purchase or sale of aircraft, vessels, motor vehicles and other licensed equipment. TSRs also file legal documents in various counties, such as tax warrant satisfactions and vacate requests.

Front Desk Representatives Systems and Process

A big part of the front desk is to provide information, flyers and other resources to taxpayers. The TSRs working the Front Desk use BRMS, ET, TARIS, BLS, RRS, and IDOCS Systems to name a few. Often times they find that BLS and Tax all have different information. The account can be closed out in BRMS and open on BLS. The business names and locations can be different as well. The user has to log into BLS (too many logins) which is time consuming. There may be DBAs in the other systems that are not in BRMS. In this case, the taxpayer has added additional DBAs with the BLS division, but the field office can only view one DBA in BRMS. When this occurs the TSR is required to email TAA to add a DBA. In addition, if the TSR determines that the NAICS code is wrong then they send an email to the Registration group. It would help if the user could see all businesses for a taxpayer when a UBI number is entered. Often times the taxpayer will pay on one account, but will have other outstanding accounts that the TSR doesn't know about until the taxpayer has exited the office.

If the taxpayer pays, the Front Desk will give the taxpayer a receipt. If the taxpayer requests a detailed breakdown of their payment and how it has been applied, it can be difficult to show in TANDEM. TANDEM Note that receipts are only produced when a taxpayer pays with cash; otherwise, the taxpayer is given a photocopy of their check with a date stamp.

The key reason that taxpayers get frustrated with the front desk is because they don't have the information immediately available or they can't provide the information in a concise and meaningful way. For instance, the taxpayer files the return via E-file, but the agent can't see it on the system for a few days. The Front Desk agent doesn't know where to apply the payment so they process the payment and submit it to Cash Management or they ask the taxpayer to use E-pay on "My Account" to make a payment. When they can't get the information quick enough, the taxpayer walks out.

Processing Tax Returns

Since E-file became mandatory for monthly and quarterly filers, the number of taxpayers entering the office has decreased. Since Annual Filers are not required to E-file, there is a higher volume of taxpayer traffic during the January/February timeframe. Since E-file is not mandatory for annual filers, there's much more traffic around this time. Otherwise, the Front Desk is accepting taxpayers who are exempt from filing electronically. When a return is received it is photocopied for the taxpayer. Any returns filed without remittance are forwarded to Cash Management.

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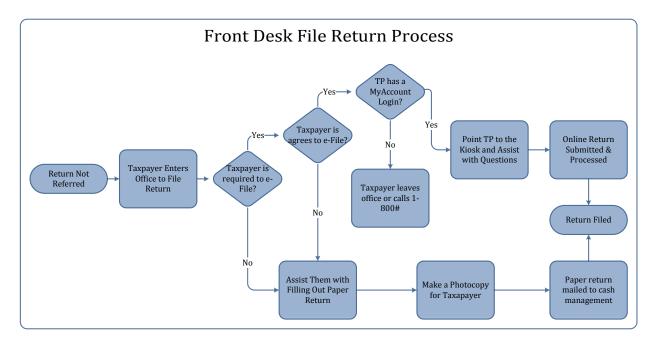


Figure 5-22: Tax Return Process

Processing Payments

The Front Desk receives and logs both cash and checks. The TSR or TIS will log it into RRS and generate a receipt for the taxpayer (receipting system does not generate a receipt for receipted check, only cash and MBA payments). The TSR or TIS will also check TARIS and ACS to see if there are any system notes that would require a Revenue Agent to speak with a taxpayer. For instance, the Revenue Agent has not been able to contact a taxpayer, additional information is needed, or the taxpayer needs to sign a document.

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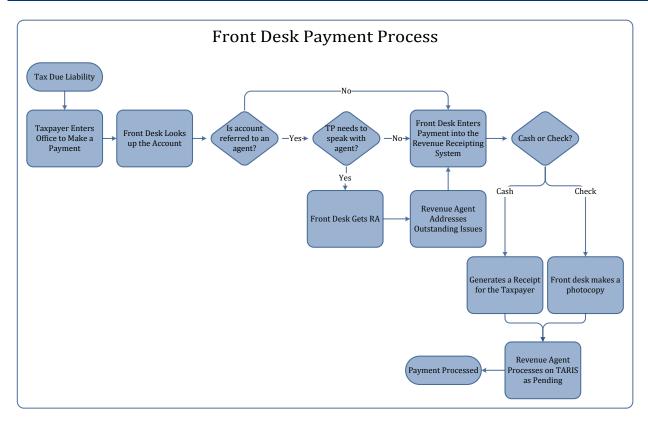


Figure 5-23: Front Desk Payment Process

Cash Out Process

The Cash Out process occurs each day and includes all payments received since the prior day Cash Out. This is the point where the Front Desk reconciles the cash, checks, and MBAs received against what was logged in the four transmittal reports in the RRS System. A transmittal report is created and the money and number of payments needs to match the report to generate the remittance memorandum. The process requires two people to count the cash (one front desk person and/or one Revenue Agent/front desk person).

The manager takes all cash collected to the bank after balancing and returns the following day to pick up a cashier's check. The cashier's check and the RRS transmittal report will go to Cash Management with the RM that day. If the total amount of the cash out is less than \$1,000 the money stays at the front office and is locked up in the safe as it will be combined with the total amount of the following day's cash out.

Note that both BLS and Tax have their own separate reconciliation reports, but all of the money goes to Cash Management. There's separation of duties from a process perspective, but it is possible for the same DOP number (i.e., user) to process the money and the tax return (only if the same DOP number did not log the same check/cash transaction). Once everything balances the denominations of the cash is entered into to a spreadsheet to create a cash reconciliation slip to include with the cash. The cash and slip are put into an envelope, which is initialed by both staff persons, sealed and then taped closed.

There are four reports they use for cashing out. The checks, documentation, and final transmittal reports are placed in an envelope that is sealed, and a label is placed over the seal and date stamped. This envelope is then shipped by FedEx to Cash Management.

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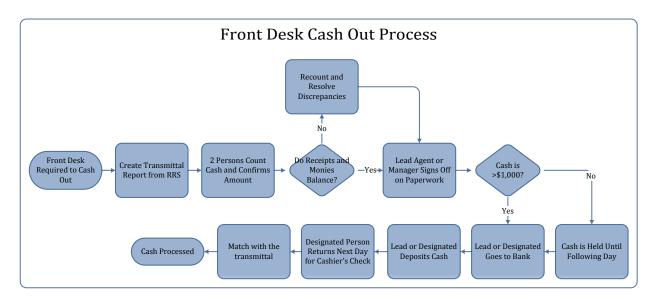


Figure 5-24: Front Desk Cash out Process

The BLS transmittal is processed the same way, with the exception that the transmittal report is signed by staff.

Scanning

Scanning is an issue with the folks that work the front desk. They have to use the photocopy/scanning machine on the floor and it's difficult to use. The user must enter the file name correctly or they will have difficulty finding it on the network (e.g., if they spell it wrong it could get saved to an unknown location). Scanned documents are either sent to the network or to the user's inbox. Once it's been scanned to the network they send a copy to TAA to be imaged on IDOCS. The Front Desk agents hold on to the physical copies for six months in the event that they can't locate the image on IDOCS. They're required to confirm, within four weeks, that the document image is available on IDOCS.

The taxpayer may file for a penalty waiver, appeal, or simply ask to see their tax return and the Front Desk Agent must be able to provide them the information. The saving of the physical document acts as an insurance policy. E-file and E-pay have helped cut down on the paper, but there's still too much paper. Documents have to be scanned and emailed to TAA to be imaged.

Taxpayer Account History – Amount Due

Often times taxpayers are asking to see a statement that shows what they owe. Taxpayers who have questions about what they owe can end up confused. ET makes the period look as though it's been paid and the balance is zero. Training can be difficult and situations have occurred where the taxpayer comes into the office and the Front Desk tells the taxpayer that they owe nothing, when in fact they owe money. In addition, tax return line items change, but the screen does not change creating inconsistencies and confusion. There's a difference between the Line Item on the return and the Line Code on the ET form. Because of this, it's difficult to walk the taxpayer through the history.

There are performance issues as well. It takes too long to pull up and research an account. The front agent's goal is to pull up an account and check if a Revenue Agent is assigned to it, but a lot of times the TANDEM System is very slow. The taxpayer is typically not willing to wait around to get an answer.

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Fielding Use Tax Questions

Taxpayers will come in asking to pay Use Tax for a car, boat, or airplane. Front Desk Agents aren't sure what the official source is for these situations. There's Kelly Blue Book information on the system, but its older information. There are physical Kelly Blue Books in the office, but the information is older. This is more of a concern for Use Tax when a taxpayer comes in and wants to know how much Use Tax they should be paying for an airplane.

When a Taxpayer disagrees with fair market value given by DOR front counter agent they advise them to obtain their own written value by either a dealership or a reputable mechanic.

CHALLENGES	OPPORTUNITIES
It is difficult to show account reconciliation.	A new Core Tax System Replacement would provide the ability to show an invoice that the taxpayer can understand.
Trying to show a taxpayer how penalties are accrued can be difficult.	A new Core Tax System Replacement would provide the ability to show an invoice that the taxpayer can understand.
TANDEM is not user friendly in that it doesn't provide spell check and word wrap on the notes screens.	A new Core Tax System Replacement would provide more user friendly functions such as word wrap.
The warrant satisfaction and vacate processes are very manual. To issue cause for another county, the process can be very manual and can take several days or weeks to get a cause number.	A new Core Tax System Replacement would provide greater automation around the warrant process. Like Pierce and King counties, the process should be more electronic.
TANDEM can be slow at times which causes the taxpayer to get frustrated and not want to wait for an answer. Agents are missing opportunities to connect taxpayers with Revenue Agents assigned to their accounts because TANDEM is slow.	A new system would provide improved response times.
Although policy does not allow, the system allows the same DOP number to receive and process a payments from a taxpayer.	A new Core Tax System Replacement would enforce separation of duties.
Valuation of property is difficult. There is no preferred source to use and many of them are outdated. There is no consistency with valuation; one office may provide a completely different valuation. Taxpayers can "shop around" for the lowest amount.	Implementation of a new Core Tax System Replacement would provide for the ability to apply Use Tax amounts consistently.
The lack of interface between the BLS and BRMS is a problem. Taxpayers will close an account in one system and the other remains open.	A new Core Tax System Replacement would provide greater interface capabilities to synch data between systems.
Notes are in a variety of places and it is time consuming to go to each of the different screens. Sorting notes by specific types of actions is not possible.	A new Core Tax System Replacement would provide consolidated notes with the ability to sort and filter based on type of note.
Users have to manually scan documents to the network, send to TAA via email, and then hold on	A new Core Tax System Replacement would improve the process for scanning, saving, storing

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to the physical copy in the event that the taxpayer is	images, and provide for a central repository
looking for it.	accessible from within the taxpayer's account.

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5.19 Revenue Accounting

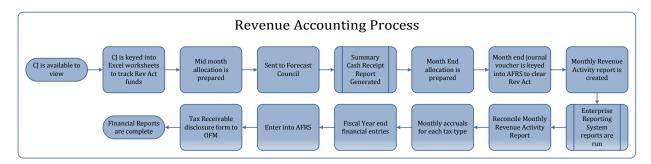


Figure 5-25: Revenue Accounting Process

The Revenue Accounting function is centralized. There is three (3) staff responsible for tax accounting functions and one (1) person responsible for BLS functions. They manage \$16 billion, over 40 funds and 170 revenue sources annually.

The Cash Management group receives payments and creates Cash Journals (CJ) in the CRRS. Revenue CJ transactions are organized by account (fund) and revenue source codes for payments received from taxpayers. CRRS interfaces with AFRS and the TM\$ to record deposits.

When Cash Management creates and verifies the CJ for Lockbox deposits, they send an email to the Revenue Accounting group that notifies them that the Lockbox CJ is available to view. The Fiscal Analyst manually keys this information in two Excel worksheets. They use these spreadsheets to report Revenue Act (Rev Act) receipts for the day and record how the receipts were distributed to each revenue source code including local taxes.

Preliminary Allocation

At mid-month and at the end of the month the Revenue Accounting group staff creates a preliminary allocation report. The Rev Act is a suspense account that must be cleared each month. These estimates are later revised mid-month and at month end when the Summary of Cash Receipts report is run. There is a statute that requires cash to be deposited within 24 hours. Rev Act is used as temporary placement of funds received for ET until the detail is available. The detail is gained as tax returns and payments are processed in ET. This allocation report goes to the Forecast Council for planning. At month end the Fiscal Analyst also creates a JV that is keyed into AFRS to clear the Rev Act suspense account and record the allocation of taxes. They use history to determine an estimated allocation of the Rev Act funds.

Cash Receipt Report

A summary cash receipt report is generated from the ET System. This report is run on the tenth of the month and the last business day the month and represents the tax returns received in the prior month. A Revised Rev Act allocation is done once they know the actual amount of each tax, through a JV process. This is compiled using an Excel worksheet. They print the worksheet and manually key the adjustments into AFRS. This requires manual keying. This action revises the preliminary allocation and is done the first day of the following month from the preliminary allocation.

Deposits

Other deposits are processed by the Cash Management group. Some of these include; Property Tax, Cigarette Tax, Real Estate Excise Tax (REET), other state agency JVs, BLS cash, and DOL CJs. There

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are multiple Excel spreadsheets used to track and reconcile these taxes.

Monthly Revenue Activity Report

The Monthly Revenue Activity (MRA) report is created in Excel every month. This report summarizes revenue activity for the month by fund and revenue source codes, as well as general ledger accounts. The JVs processed throughout the month, AFRS Refunds, DOL Cash Receipts, and Summary report from CRRS are manually keyed into the spreadsheet. Reports from the Enterprise Reporting System are used to reconcile MRA report to AFRS. The report is due on the third business day of the month for the prior month report, and not distributed until it is balanced with AFRS. Manual keying into AFRS and into the MRA report is necessary. Lack of the validations from AFRS may cause items with incorrect coding to pass through. Typically the Fiscal Analyst is able to find those errors when reconciling MRA reports. These are corrected with JVs.

The actual official record is in AFRS, but often times the MRA report provides are more detail such as collections and distributions in local government funds. AFRS does not provide the level of detail in the format required by the agency. The Fiscal Analyst closes funds sooner than AFRS so that cash activities are recorded in MRA Cash report. Monthly accruals for each tax type are recorded in AFRS and the separate worksheets MRA Report. The MRA Report is saved to a shared drive for users to view. An email is sent out to notify that the report is available.

Monthly Financial Entries

Monthly financial entries are prepared using TARIS reports for most taxes. Receivable reports for Estate Tax, Deferred Property Tax, Cigarette Tax, E911 Tax, Property Tax, BLS, Local Tax, and Hotel Motel Tax are gathered from different sources. They use Excel spreadsheet to calculate collection ratios and breakdown of receivables, and to prepare JVs to record receivable information in AFRS.

Year End Reconciliation

At the end of each fiscal year, they prepare multiple financial entries in addition to monthly financial entry JVs and process them in AFRS. They are also required to fill out disclosure forms for the Office of Financial Management (OFM). One of the reports is the Tax Receivable Disclosure Form. They use Excel spreadsheets to show the breakdown of receivables. The information is manually keyed into the Disclosure Form System. These forms must balance with AFRS.

There are also quarterly inquiries from OFM to investigate the increase or decrease of funds that change five (5) percent or more. Most of time Revenue Accounting relies on the administering divisions to explain anomalies.

- <u>Cigarette Tax</u> is collected by sales of cigarette stamps which are affixed to each cigarette pack by cigarette distributors. The Revenue Accounting group staff uses an Access DB to track orders and sales of cigarette stamps and collection of Cigarette tax. They save the report in a Word and PDF document, and manually key the order information into the database. The payments from distributors are electronically transferred to a bank account with US Bank that is cleared by OST two business days after the deposits are made. OST creates a Cash Receipt Journal for the fund they swipe daily for the Cigarette tax. The Fiscal Analyst retrieves this CJ from TM\$ to enter the collection in AFRS.
- <u>Leasehold tax</u> uses a Visual Basic DB for distribution to local governments bi-monthly. The Special Programs Section enters Leasehold tax returns they receive into the database. The Fiscal Analyst reconciles the database to deposits recorded in AFRS, and generates a distribution file sent to OST.
- Property Tax receivables require a monthly JV to summarize Property Tax and cash receipts

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journal. They utilize an Excel spreadsheet to track levies. The Fiscal Analyst inputs into Excel so they can reconcile with the Property Tax System. These can take five (5) years to collect. If there is still a balance due it is rolled over to the next year.

Other various financial reports are sent to the Revenue Accounting group from the Estate Tax System, Unclaimed Property, Forest Tax System, natural gas, REET and vessels to transfer funds.

Refunds

Refunds are processed through CRMS interfaces with AFRS and OST. CRMS refunds are printed on DOR's warrants because special text must be printed on the remittance for the taxpayer. The Revenue Accounting group receives warrant registers. The report lists the warrants that went SOL for the month. If it is a CRMS refund the credit must be re-established in CRMS by Revenue Accounting, and TAA researches to decide if they should reissue the refund, apply the credit to outstanding returns, or send the credit to Unclaimed Property. The Fiscal Analyst creates lists of SOL warrants for other taxes, Unclaimed Property, and expenditures in Excel, and sends it out to the divisions that administer the program.

Refund warrants returned to DOR are sent to the Cash Management group first. They send the copy of the warrants to sections initiating the payments to determine if the warrants need to be cancelled or sent out to a different address. If the warrant needs to be cancelled, it is sent to the Fiscal Analyst for cancellation.

The Fiscal Analyst creates a JV to record cancellations in AFRS, and sends the JV and the original warrants to OST. If the check was lost they require an affidavit from the taxpayer to cancel the warrant.

Unclaimed Property Warrants

Unclaimed property warrants are processed through the UCP system which interfaces with AFRS. BLS refunds are manually keyed from reports. Miscellaneous refunds are manually keyed unto AFRS from Invoice Vouchers.

TMS Reports

The Revenue Accounting group has access to TM\$ reports that show tax type distribution, what funds were posted, warrant lookup, electronic transfers, transmittal registers for ACH refunds, warrant status, cash balance by day, outstanding warrants, in process cash, and copies of redeemed warrants.

The Revenue Accounting group uses TM\$ to view the deposit of interest earnings in local tax accounts. The interest earnings need to be distributed out to local government monthly or bi-monthly depending on the funds. They allocate interest earnings based on the previous month tax distribution in an Excel spreadsheet. They use the Tumbleweed Secure Transport System to upload the distribution file to OST.

CHALLENGES	Opportunities
Researching reconciling reports require the user to access multiple points to gain the information required or requires the Revenue Accounting group to rely on other groups (e.g., IS, TAA) to perform the query.	A user friendly one stop user interface, that allows the Revenue Accounting group resources to perform their own research, would allow user to consolidate efforts. It would also cut down on the duplication in review steps.
The user must go to multiple systems to perform their work.	A new Core Tax System Replacement could provide user friendly screens for users to access information in one place.
Revenue Accounting staff must manually enter information in multiple places.	If the import or auto-population features were available it would allow the user to spend time reviewing entries instead of keying them.
The Fiscal Analyst has to manually calculate trends	Add a system function that will calculate trends

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for reporting.	automatically.
There is no central system that partners have access	A user interface that allows partners to look up general
to research information. They rely on the Revenue	information should be considered.
Accounting group instead.	
Reporting is limited to canned reports. If more	Ad-hoc reporting capabilities would allow the user to
detail or organization of data is needed it requires a	query data to gain the data set required without going to
request to IS to create the file.	IS for the information.
The allocation process is done four times a month.	The system needs to capture information more timely.
This requires the user to estimate the allocations	If the payments were posted to the account and fund to
and then go back to reconcile that with actual	which they belong the first time it wouldn't require the
numbers. This process is very time consuming and	need for estimating allocations. Automating portions of
the information is keyed manually to populate the	this process is needed.
required information and the reports needed are	
located in multiple places.	

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5.20 External Integration Assessment

DOR exchanges data with over 27 external agencies and entities. The process, frequency, and format in which data is exchanged vary by interface. Information is received in all types of file formats. For instance, files are received via flat file, text, CSV, Excel, and PDF. The DOR owner also varies as some data exchanges are owned by IS while other data exchanges are owned by the business users of that information. Once data is received, the location were data is loaded also varies. Data can be loaded directly into the TANDEM Systems, data warehouse, Access DBs, or saved to a network location to be viewed by the business users. The protocols on quality assurance checks, as well as storage of the original file also vary. Some files are saved while others are discarded after initial use. There are times when the business owners or IS are fielding the same types of requests from multiple agencies. An opportunity exists to standardize the way in which data is exchanged, making it consistent and available to all DOR users of the Core Tax System.

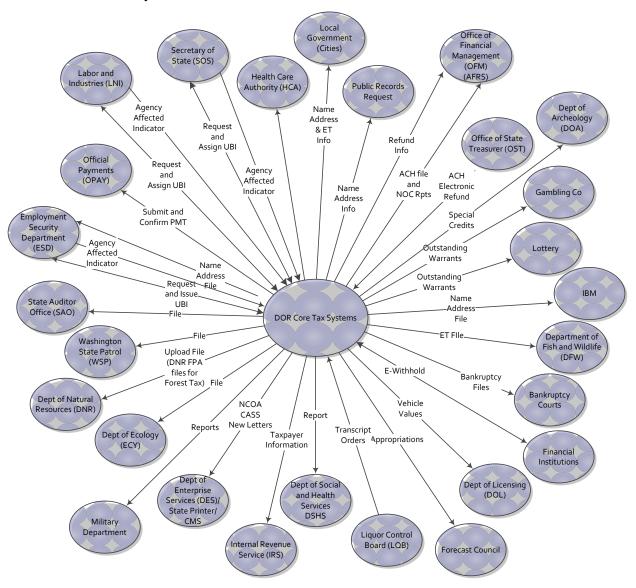


Figure 5-26: External Integration with Agencies

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CHALLENGES	OPPORTUNITIES
Information is received in all types of file formats.	A new Core Tax System Replacement would provide standards, protocols, and procedures around how other state agencies interface with DOR.
The DOR owner also varies as some data exchanges are owned by IS while other data exchanges are owned by the business users of that information.	A new Core Tax System Replacement would include business processes around who should own external integration in order to centralize the process.
Data can be loaded directly into the TANDEM systems, data warehouse, Access DBs, or saved to a network location to be viewed by the business users.	A new Core Tax System Replacement would provide the ability to load information to one place (e.g., data warehouse) prior to loading to the final location so that other groups may take advantage of the data and so that it's easily accessible should the business user need to go back and view the data as it was received.
There is a lack of protocols around quality assurance checks, as well as storage of the original file also vary.	A new Core Tax System Replacement would provide the ability to perform data exchanges that encompass a quality check to confirm that what was sent or received was done so successfully.
Users often find that they are fielding the same types of data requests from multiple agencies.	A new Core Tax System Replacement would provide the ability to implement services that other agencies can consume when making standard requests for information (e.g., taxpayer demographics).

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6 Technical Architecture

The current state assessment of the DOR Core Tax Information System (IS) architecture revealed an infrastructure consisting of various sub-systems, multiple platforms, aging technologies, and custom applications. Most of the Core Tax System employs designs that are more than 15 years old and has been augmented or patched as regulations, processes and agency relationships changed. Built upon designs and technologies of the past, the Core Tax System has functioned beyond its productive life. The current system and its technical architecture struggle to keep pace with change, regulation volatility, tax law complexity, and new technologies.

The Core Tax System assessment team discovered an application architecture that is difficult to maintain, complicated to enhance, and costly to support. The system does not optimally support the current DOR business processes foreseeable future needs. Additionally. system components and related interdependencies have not been documented, so the system's reliability is expressly dependent upon the retention of existing system experts. Seemingly minor system/application enhancements and the associated testing can take months because of the inability to adequately architect the changes. It is just as difficult to accurately analyze the change impact on the interdependent systems/applications and business processes. Testing is further inhibited by the use of inadequate testing environments, limited testing tools, and minimal test scripts and processes.

All organizations want to realize the highest business value possible from their existing investments in IT infrastructure and application software. However, maintaining the application and infrastructure software in a legacy environment consumes a disproportionate percentage of IT budget and human resources. The average company spends from 60 to 85 percent of its IT budget maintaining legacy applications that fail to meet the changing competitive needs of the business.

Enabling Strategic Business Transformation, 2010

Core Tax Systems are built on two different platforms:

TANDEM and Microsoft. The distinction between these platforms for using or expanding functionality is as simple as this: Newer functionality is predominately available in the Microsoft environment, while functional enhancements and updates are predominately developed in the TANDEM based systems for expediency. When it comes to legislative changes, a platform selection appears to be made from experience, availability, ease of change, opportunity to change platforms, or business rule location. These discrepancies between technically desirable versus expedient approaches have resulted in technical issues and risks:

- Large numbers of data transfers, synchronization issues and system interfaces increase the risk of processing errors.
- Variations in how applications are developed, tested, and deployed contribute to the dispersion of business rules, creating opportunity for error.
- Complexity in regression testing spans the platforms.
- Incongruent system development lifecycles lead to separation of knowledge as applied to changes and inner workings of the system.
- Multiple, redundant skilled resources with intimate knowledge of DOR tax and Core Tax System are required to manage multiple technical platforms.

This Technical Architecture provides an overview and assessment of the Core Tax System and is arranged in the following subsections:

- 6.1 Overview An overview of the complexities inherent in the Core Tax System.
- 6.2 Infrastructure Architecture A description of the information, platforms, and interfaces.

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- 6.3 Solution Architecture A description of how the systems support the Core Tax functions within DOR.
- 6.4 Data Architecture An assessment of the data structure, storage, use, and security.
- 6.5-6.15 System descriptions of the Core Tax System.

6.1 Overview

At this time, Core Tax System has over 100 small applications/sub-systems, over 1000 data tables, many MS Excel and Access workarounds, dozens of interfaces, batch jobs, multiple data and access methods. Many of the interactions and interfaces are known by IS Staff, but lack the required documentation needed for knowledge transfer. To maintain this conglomerate, many technologies and applications have been preserved beyond end of life (no longer supported by the vendor). Unsupported versions of desktop applications (.Net, Excel, Access, etc.) remain as part of the overall Core Tax System, even without maintenance or patches. Upgrading this software would mean that older functionality may not be supported or available. Upgrading the applications introduces unknown levels of risk, rework, and downtime. However, managing multiple versions of the same application compounds the configuration effort and number of development tools, database versions, and desktop utilities required to support business operations.

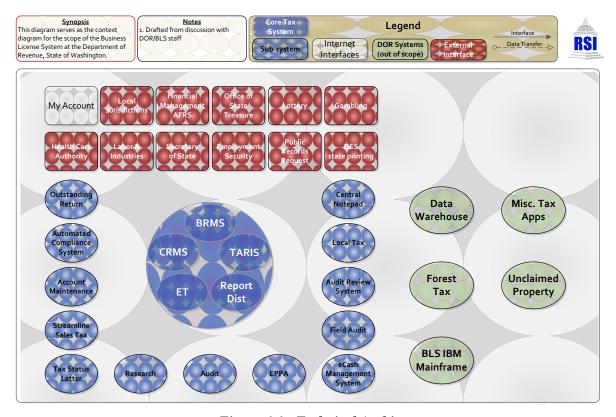


Figure 6-1: Technical Architecture

Data integrity is routinely compromised as data is transferred from system to report, from report to spreadsheet, from report/spreadsheet to database. At any point, the data can be manipulated to satisfy business process requirements and then passed to the next system with minimal control or data validation. Data is keyed at various stages, opening it up to error. It also appears that data 'at rest' and 'in transit' is not secured, once it leaves its native platform.

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From a continuity and business resumption perspective, the Core Tax System should be prioritized. At present, mission critical business functionality is not well defined and associated to system components. The system functionality is not mapped to business processes, business areas, policies, or business rules. IS Service Level Agreements (SLAs) are not in place protect the DOR mission critical systems.

Four commonly cited factors contribute to the current Core Tax architecture complexity: Washington Tax structure, custom/in-house applications, the complicated path to replacement, and undocumented architecture. These four factors have sequestered IS efforts into maintenance or evolutionary improvements.

6.1.1 Complex Washington tax structure

The tax structure is fairly complex with a variety of unique tax programs, multifaceted registration and licensing issues, and tax variations depending on location. These complexities are increasing due to economic and political factors beyond the control of WA DOR. The inflexibility of the current Core Tax System makes it difficult to adapt to and support the Washington Excise Tax structure.

Current methods and rules used to process these taxes are specialized around license types, tax types, locations, and other special considerations, making the Core Tax System complex.

6.1.2 Complex set of custom applications

In addition to the complexity of Tax structure, the Core Tax System consists of custom applications, developed in COBOL on TANDEM technology over several decades, new application development efforts utilizing Microsoft/.NET. As a result, the diversity and complexity of custom applications continues to grow. Additionally, enterprise standards and reusability are not strategically built into development efforts, application maintenance or system upgrades. The impacts and/or issues around consolidation or elimination are very hard to estimate due to the interdependencies. These factors lead to a very complex set of custom applications requiring specialized development and configuration techniques performed by resources that have an intimate knowledge of the Core Tax business and applications. Furthermore, the rules associated with the Tax Law are spread across the entire IS infrastructure rather than centrally managed. Changes to the Tax structure ripple throughout the Core Tax System as the associated and impacted business rules are discovered and changed. Single components of the Core Tax System cannot truly operate independently of the other components. In many ways, it is a misnomer to consider the Core Tax System as integrated; rather, they are codependent.

6.1.3 Complex path to modernization or replacement

Another layer of complexity is associated with modernizing the Core Tax System in a timely manner, while keeping taxes flowing in Washington. The perception has been that the cost and level of effort involved in modernizing or replacing the system's platforms, operating systems, environments, databases, coding languages and applications, are far greater than the effort to maintain or tactically improve the existing systems. Continued maintenance has been the path taken in past years, which has resulted in a system that is now extremely complex, increasingly inefficient, and costly to enhance. Without a clear modernization strategy, it is necessary to:

- Maintain a wide range of aging technologies.
- Increase the number of resources, systems, and sub-systems.
- Ask staff to do the impossible, keeping track of innumerable interdependencies.

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Operational issues such as the cost of system/application development and maintenance, data integrity and security concerns, and high risk of tax processing failure are mounting up to accelerate the need to modernize or replace the system, yet also creating challenges to that modernization.

Based on the current investment strategy, age range technology and number of systems, the complexity involved in modernization and replacement continues to grow. Risk of failure and loss of quality increases as newer versions of drivers, patches, desktop applications, test tools, and security modules emerge. Actual and potential failures create a demand for more detailed and rigorous testing, which translates to more maintenance time and budget.

New laws require new rules within the systems and continue to increase the complexity of the Core Tax System. Implementing legislative changes disrupts the existing flow of the system, which inserts a certain amount of instability. To overcome this issue, DOR continues to increase investment in resources to cope with inefficiency, implement risk management strategies, and deal with emergency fixes and tactical solutions.

6.1.4 Complex Undocumented Architecture

The Core Tax System architecture is not documented. Details as to how it was built and how it was changed do not exist. Undocumented systems impact large scale transformation efforts (i.e., modernization, system software upgrades, system replacement, operating system changes, RDMS migration, and switching coding language). It is not uncommon for custom solutions similar to Core Tax to lack the required documentation once the system enters maintenance-only mode, and this can often be an important factor in driving modernization. The lack of documentation is particularly damaging as the DOR workforce retires, and with it goes critical business rules and knowledge of the system.

6.1.5 Major Project Effort

The technical architecture evolved over the last twenty years as DOR approached the above complexities and created the Core Tax System. The table below presents the systems, their development time frame and resources required, and the platform upon which they were built. Furthermore, this table demonstrates the number of small projects undertaken by IS and the lack of large, complex projects similar to what a Core Tax System Replacement will be.

Table 6-2: Major Projects

Project name	Description	Year Started	Duration	Resources	Platform	Language
ET System	Initial development of the current Excise Tax system	1994	3 YEARS	12 FTE	HP NSK	Cobol
TARIS	Tax liabilities (Accounts receivable)	1994	5 YEARS	6 FTE	HP NSK	Cobol
CRMS	Credit Management	1990	2 Years	4 FTE	Windows Server	C#;#COBOL;#SCOBOL;#JCL;#DORCL;#JAVA

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	System				2003;IBM;HP NSK	
BRMS	Business Registration Management System	1991	4 Years	4 FTE	IBM; HP NSK	VB6;#COBOL;#SCOBOL;#JCL;#DORCL
ACS	Automated Collection System	1992	3 Years	5 FTE	Windows Server 2003;#HP NSK	.NET 1.0;#.NET 1.1;#.NET 2.0;#.NET 4.0
Lease Hold	Add Lease Hold functionality to Core tax based on legislation	1998	1.5-2 years	2-4 FTE	MS	C#/NET
Estate Tax System	Add Estate Tax functionality to Core Tax based on legislation	2001	1.5-2 years	2-4 FTE	HP NSK	Cobol
Forest Tax (E-file)	Add Forest Tax functionality to E-file based on legislation	2006	1.5-2 years	2-4 FTE	MS	C#/NET
UCP Unclaimed Property	Add UCP functionality to Core Tax based on legislation		1.5	2-4 FTE	HP NSK	Cobol
E-file	Implement E-file capability at WA DOR	2004	7 years	2-4 FTE	MS	C#/NET
E-file amended return	Latest addition to E-file functionality	2012	Currently active	1 FTE	MS	C#/NET
BLS	Move the entire system from DOL to DOR.	2010	1 years		IBM	Cobol
Local Tax	Move the local tax	2012	Currently active		MS Serv	C#/NET

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distribution function to a MS SQL and .Net environment

6.2 Infrastructure Architecture Findings

The Infrastructure Architecture for the Core Tax System consists of a stable core information architecture; sub-systems on multiple platforms; aging technologies, and complicated interfaces. While components of this architecture began with a design engineering foundation, the entire system has developed incrementally over time.

6.2.1 Information Architecture

The Information for the Core Tax System is highly impacted by the solution architecture (i.e., various sub-systems, multiple platforms, aging technologies, and custom applications). The initial and oldest components of the Core Tax System are Cobol applications accessing a monolithic Core Tax Database on the TANDEM system. This single database consists of over 1,000 tables and is accessed directly by Core Tax and Non-Core Tax systems, by TANDEM applications, and by non-TANDEM applications. The information architecture is extended beyond the TANDEM system through replication to applications on the Microsoft platform.

While the database design is functionally and technical operational, many factors contribute to limited information availability. As discussed in early segments of this document, an excessive number of business workarounds, spreadsheets, Access databases, reports, desktop procedures, and recalculations have been implemented. These are in direct response to information architecture limitations: need for consolidated entity information, case information, validation, and audit. However, they reflect functional issues with workflow, user interface and ability to automate transactions.

6.2.2 Multiple Platforms

The Core Tax IS environment consists of two primary platforms: TANDEM (HP Nonstop, SQL, and COBOL) and Microsoft (MS Server, SQL, .Net (Microsoft). Core Tax functionality and source data has traditionally been deployed in the TANDEM environment, while new features, reports, and web enablement occur primarily in the Microsoft Environment. As is typical, DOR TANDEM systems consist of invaluable assets with embedded business logic representing many years of coding, developments, enhancements, and modifications. However, the features, functions and nuances are now undocumented, tightly coupled, relatively closed and explicitly inflexible. Most of the sub-systems were developed and are maintained independently without a consistently documented future state architecture. New development may leverage existing TANDEM functionality, but for the most part, data is replicated and logic is worked out on the new platform. The main pain points of DOR multiple platforms are:

• **High cost of ownership:** Especially costs of maintenance, operation, and upgrade of both software and hardware on both platforms; Costly development time, testing time, and maintenance time. As significant number of IS Staff is maintaining, patching, or augmenting the existing Core Tax System, leaving few resources for transformation, innovation, and system replacement. Additionally, many of business users are working on or with Core Tax System workarounds: procedures, spreadsheets, and databases.

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- Long lead time to deployment: Legislative changes, fixes, and enhancements take a long time to develop, test and deploy because of complex and undocumented code, interfaces and existing business rules. This has prevented the TANDEM system from satisfying the evolving business requirements because simple changes take too long to complete and test. Changes tend to cause significant ripple effects and require more regression testing. This, in turn, increases maintenance and evolution costs. (Note: this is the real cause of many of the business driven solutions outside IS.)
- Shrinking talent pool of developers: DOR must maintain two sets of developers for TANDEM and Microsoft. Developers skilled in TANDEM/COBOL systems are decreasingly available, while vendor support for the platform becomes more costly. Internally, knowledge of these systems is restricted to a core set of people who will be difficult to replace. While Microsoft developers are more readily available, few have cross platform skills.
- Lack of application knowledge: In-depth intimate knowledge of the applications resides in employees rather than in documentation, modeling tools, data dictionaries and other forms of architecture definition. This is due to the departure of original developers or users, and significant amounts of the documentation are obsolete or simply non-existent.

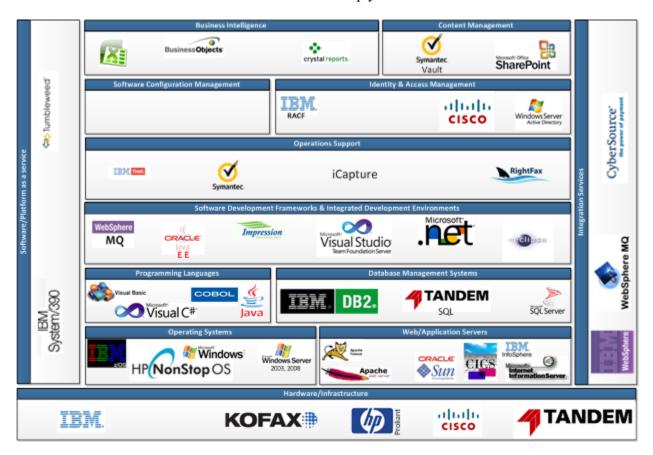


Figure 6-2: Core Tax Architecture

DOR has a significant investment of time and money in the TANDEM infrastructure. Management has considered and delayed replacement of the TANDEM systems which are now beyond intended life. However, rewriting or significantly modifying large portions of the TANDEM environment has not been considered practical or realistically accomplishable in a reasonable time frame. Significant strategic planning is required to maintain modernize or replace the infrastructure.

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6.2.3 Complex interfaces

DOR has developed and managed Core Tax primarily on a TANDEM (HP Nonstop) system for decades while new issues are arising from integrating an increasing number of web applications, E-file, and other external systems that work from other technologies and platforms.

The following figure illustrates the basic issue for DOR when it comes to internal interface complexity, with six interface options. The two platform model (without target architecture) requires an interface for each new application or service developed on the Microsoft platform. Interfaces primarily consist of a number of translation tools to allow the Microsoft applications/systems to access, read, update and create data in the TANDEM SQL database. Interface standards are slowly emerging. Each time a new interface or database connection is established it decreases TANDEM flexibility and adds to testing complexity. This requires a high level of documentation on both platforms and constant communication between developers for each platform and business area.

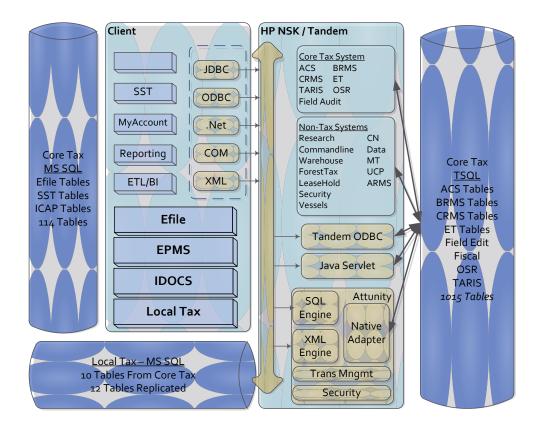


Figure 6-3: Complex Interfaces

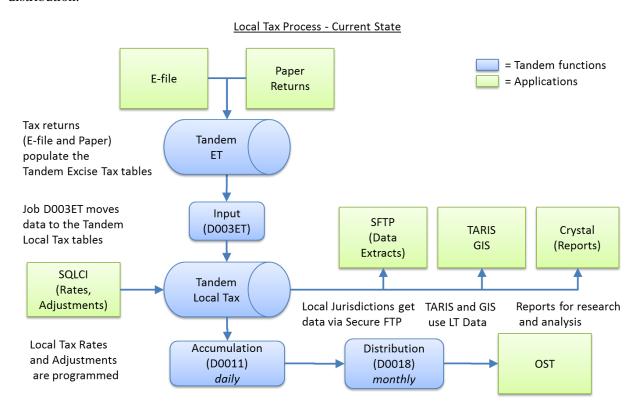
DOR has tried many interface solutions, with varying levels of success. The following table lists a number of methods that DOR IS staff has attempted and their insights and issues with the methods. The various interface methods have been implemented and are in production. It is difficult to maintain or improve each of these methods separately; DOR needs to have a standard interface methodology as part of the future architecture to alleviate this problem.

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Table 6-4: Methods and Observations

Method	Observation
Java Servlets	Requires SQL compile with each execution. Due to this compile, response time is slow. As volumes increase the problem compounds and response time becomes unacceptable.
Java servlet wrapper on a COBOL server	The Servlet is precompiled, and ready to go as required. This offers considerable performance improvement. Performance comes at the cost of prescriptive reply format, due to COBOL programs source.
TANDEM ODBC (MP)	Similar to Java Servlet, a SQL compile required. In addition, there are some security issues/risks.
TANDEM ODBC MX	Uses OSS mappings to SQL/MP tables. This method may offer a form of stored procedure – this might mitigate the SQL compile problem. Same security issues, most likely. Not much DOR experience with ODBC/MX.
Audit 2000	Uses RSC (Picolo).
Leave System	Uses a C++ program to send email.
Command Line Web	The core of the security system for intranet applications. Also assists with data from TANDEM NS SQL and with ECMS.
FTP Files	TANDEM sends files to Excel spreadsheets using FTP. Files are dropped to a shared directory to be accessed by business staff.

To serve as an example, the Local Tax system is going through a rewrite at the time of this assessment. The goal is to move the Local Tax distribution from the TANDEM to the Microsoft platform. This change is due to the potential for critical failures in Local Tax distribution. In the current Local Tax system, ET data is moved to TANDEM Local Tax tables within the same database to prepare for distribution.



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Figure 6-5: Local Tax Process-Current State

Rates and adjustments are made to this data directly in the TANDEM Local Tax table. Daily batches accumulate the data for monthly distribution. In addition, three separate interfaces are maintained to perform a secure file transfer (Microsoft application) from TANDEM to local jurisdictions; TARIS and GIS are updated with local tax data. In all, seven interfaces are maintained to calculate, accumulate and distribute Local Tax.

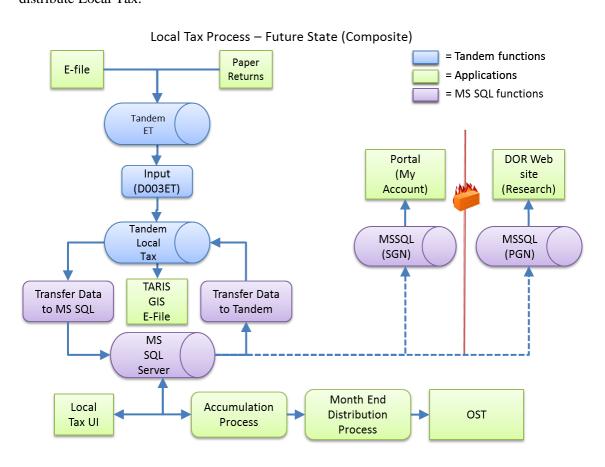


Figure 6-6: Local Tax Future State

The Future State for Local Tax will remove the dependency on two current TANDEM functions (accumulation and distribution). The diagram above displays the additional complexity required to interface between the platforms: Newly replicated data, TANDEM/MS SQL synchronization, and new Microsoft applications to handle Accumulation and Month End Distribution.

This example reveals the difficult issues that arise in the current two platform structure:

- Cost of development and maintenance while migrating functionality to the MS platform.
- Increase in data redundancy for off-TANDEM accumulation.

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- Difficulty to migrate the entire Core Tax data to another platform.
- Minimal reduction in IS maintenance time, resources and cost for each migration.

There are benefits with this new approach. There is significantly more opportunity to access, control, and log data usage. The solution can be configurable to support new accumulations and distributions and automatically support the other interfaces.

6.3 Solution Architecture Findings

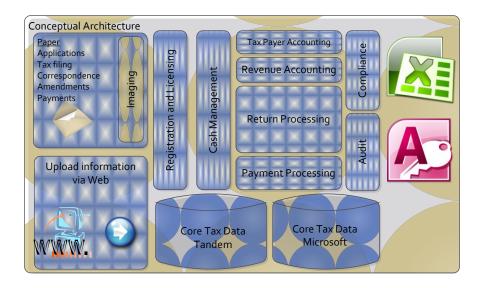
The Core Tax Solution Architecture revolves around several key lines of business or Core Tax domains.

- Registration and Licensing
- Taxpayer Accounting
- Cash Management
- Return Processing
- Revenue Accounting
- Payment Processing
- Audit
- Compliance

Core Tax solutions support these Core Tax domains by providing process, data and technology to fairly and efficiently collect revenues and administer programs to fund public services, and advocate sound tax policy (DOR Mission). For each of these domains, DOR has taken a tactical approach to addressing particular system requirements, and this has often resulted in a disparate set of functionality not unified around a central, enterprise vision. System requirements for these Core Tax Functions have evolved over the years, through the addition of various tax types and other legislation exacerbating the problem.

The solution has four main components to support the Core Tax Functions:

- An Imaging component accepts, scan, and processes paper forms and correspondence
- Web facing components for electronic filing of tax returns, payments
- Data management capabilities for multiple platforms
- Core Tax processing systems that contain a portion of the business rules, processing and information retrieval



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Figure 6-7: Conceptual Architecture

6.3.1 Solution for the Core Tax Functions

The current solution for Core Tax leverages input systems, data, and platforms as part of the solution architecture. More than 100 systems (or applications) compose the Core Tax solution, with each application providing support to one or more Core Tax functions. All of the Core Tax functions use the TANDEM SQL database, either on the native platform, through interfaces, or available through replication. (As mentioned, the Audit and Collections functions leverage reports and other sources of data to build their own Access database(s) and Excel spreadsheets.)

The business functionality is delivered via batch programs, server programs, requester programs, and subroutines. Many of these systems have SQL reporting capabilities. Also, the TANDEM solutions have a custom job control language called DORCL. This is an in-house developed and maintained custom control language. As seen in the following table, these systems provide solutions for one more functions.

Due to the nature of these Core Tax functions, data integrity must be as high as possible. Access databases are also used to track and compare data from various reports for the purpose of confirming data integrity. With all of the platform changes, replication, and interfaces, very minimal analytics are performed on data processing and business.

INPUT DATA **PLATFORM Core Tax Functions** Electronic filing Microsoft DBs **FANDEM DB** Narehouse Imaging Core Tax Core Tax **TANDEM** Microsoft Registration and Licensing Χ Χ Χ Χ Χ Χ Χ Tax Payer Accounting Cash Management Χ Χ Χ Χ Χ **Return Processing Revenue Accounting** Χ Χ Χ Χ Χ Χ Χ Χ Χ Χ **Payment Processing** Audit Χ Χ Χ Χ Χ Χ Χ Χ Χ Compliance

Table 6-8: Core Tax Functions

To add functionality to the Core Tax, DOR staff have created various Excel spreadsheets to:

- Calculate new tax
- Verify credits
- Track audits
- Run business rules
- Perform analytics

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These ancillary systems are critical to the day-to-day DOR operations, and they have created issues and risks within the current environment.

- Users must often enter data manual from one system to another, exposing the process to human error and removing many of the important system controls existing elsewhere in the solution.
- Users have developed complex macros to assist with various functions (e.g., tax calculations, audit functions, data loads, etc.), and these macros are not documented.
- Each of these systems may contain legislatively or administratively mandated rules, yet the disparate systems means that these rules may not be applied consistently throughout the tax administration process.

Table 6-9: Systems to Core Tax Functions (Rules for all functions spread across systems)

			EXCISE	ETAX	CUST SEF	IS						
Core Tax System	Registration	License	Return Processing	Cash Management	Payment Processing	Taxpayer Accounting	Revenue Accounting	Audit	Compliance	My account	Reporting	Information Systems
BRMS	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ET				Х	Х	Х	Х	Χ	Х	Х	Χ	Х
TARIS				Х		Х	Х	Χ	Х	Х	Х	Х
CRMS				Х		Х						Х
OSR			Х						Χ			Х
ACS								Χ	Х			Х
E-file			Х		Х					Χ		Х
ECMS									Х			Х
IDOC			Х									Х
ARS								Χ	Х			Х
EPPA					Х	Х						Х
Field								Χ				Х
Audit												
Local							Х					Х
Tax												
DW								Χ	Χ		Χ	Χ

Business rules are ubiquitous across DOR, serving an essential role in expediting tax processes and ensuring compliance. The incremental approach to developing the Core Tax System and the adoption of multiple applications and platforms has led to a proliferation of rules throughout the IS environment. These business rules, at all levels, manage the policy, rates, credits and invoices throughout the tax lifecycle. In addition, workflow processes from working paper tax returns to complex audits and compliance issues also contain many business rules. While the creation of automated rules in one of the various Core Tax applications improves process efficiency, managing burgeoning sets of rules creates

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new challenges and complexities for developers and business staff, alike. Today, the business staff is seeking to manage business rules efficiently and support unique workflows for the rapidly changing tax landscape.

Core Tax does not have a clear documentation process to assist in the management of business rules, mapping law to policy to rule, and rule to rule across systems. The direct impact of this situation is that developing or adding new functionality requires extensive research or decisive assumption. Even if extensive research and assumptions are 99% correct, each enhancement elevates the risk of the next. Out of all of the issues, the lack of business rule management is what makes Core Tax the most unstable.

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6.4 Data Architecture Findings

The DOR Data Architecture is contained primarily within TANDEM and MS SQL and is used by various applications within Core Tax. Various application development teams' access data from both platforms and many developers are unaware of how the data is used upstream and downstream. Additionally, Subsystem owners do not know all of the applications that access the data. Non-Core Tax System programs directly access BRMS and CRMS data. While these systems primarily read from the database, all have Create, Update and Delete privileges. Through different channels, systems on the Microsoft platform also access the data.

Due to the complexity in sub-system, and their use of data, many business areas do not depend entirely on the Core Tax System to access this data. Instead, business areas rely on dozens of reports; Excel spreadsheets and Microsoft Access databases, strewn throughout the organization. This leads to several problems; reports do not agree, additional time is required to provide executives with information, and confidential information is not effectively protected or secured. Data is unnecessarily redundant, lacks consistency and data quality continues to suffer.

The following points represent observations made with regards to the security of data at DOR. For the most part, data transmission, web, and system access have been secured through standard means. This being said, there are many security issues that should be addressed.

6.4.1 Not Knowing who uses what data and where it is stored

While the data is in transit to the Core Tax System, or at rest in the various databases, data is protected via standard authorization techniques. However, DOR cannot really secure data without knowing in detail how it moves throughout the organization. Minimal tracking can occur in system-to-system transfers because much of the Core Tax System data is sent to reports and Comma Separated Value files for use by other business areas. It is literally impossible to determine where data is at any given time. Data is secured in the Core Tax System, but once the data provided in a report or CSV file, it is then outside the normal security architecture. Data is then keyed into spreadsheets and databases and tracking is manual.

Recommendation

DOR should begin by conducting a thorough inventory of sensitive data and its location throughout the various systems. Then, centralize or secure the most sensitive data and put tracking in place. Model existing data flows and storage for the current state, and create a data management strategy that includes data security. Communicate these data standards, data security, and the risks associated with data security threats to developers and users of the Core Tax System.

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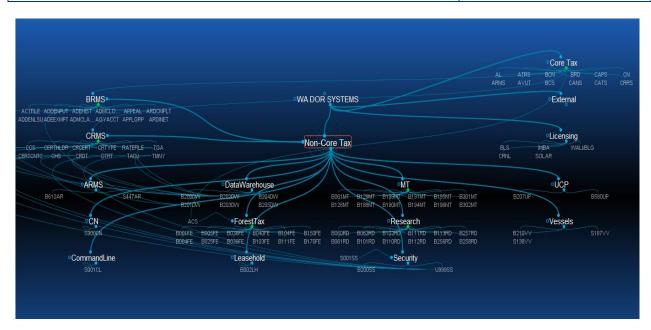


Table 6-10: System Data Interaction

6.4.2 Treating All Data Equally

DOR data is confidential with the exception of business data that is permitted to be published on web sites. Business owners and managers have not worked together to classify data according to its sensitivity. Data outside the Core Tax System, but inside the firewall, is basically unsecured and treated equally.

Recommendation

Correlate a variety of criteria, including regulatory compliance mandates, application utilization, access frequency, update cost, and competitive vulnerability to arrive at both a value for the data and a ratio for determining justifiable security costs.

6.4.3 Regulatory Compliance Concerns

Virtually all government (DOR included) privacy and security regulations boil down to the most basic best practices of data security. So being able to pass a regulatory audit does not automatically ensure effective security. DOR data is not protected in flight and at rest via encryption, role-based security, and regular security audits.

Recommendation

Consider developing and complying with security-centered processes, policies and people, reinforced by security solutions such as automated policy enforcement, encryption, role-based access, and system auditing.

6.4.4 Data Retention

DOR does not have a comprehensive data retention strategy. DOR maintains a high level of risk by retaining sensitive tax data that could be removed (e.g., electronic from all systems and paper data from files). Data retention and removal is not part of an enterprise data management strategy. DOR data owners

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and stewards have not been clearly defined, nor have they worked with the legal department or the DOR data librarian who usually is well versed in the relevant regulations.

Recommendation

Develop a Data Management strategy, data ownership program, and ensure relevant regulations are followed. Audit and assess these components annually.

6.4.5 Data Risk Policies

DOR has not determined what real threats exist and mapped those to existing or available enterprise data protection technologies, policies, and procedures. DOR has not compared the "reasonable" nature of current security relative to peer organizations. Policies and processes have not been modeled and compared to the best practices of the most secure WA or tax organizations.

Recommendation

DOR should align data security efforts and policies with the apparent risks and threats. This should be part of the large data management plan.

6.4.6 Data integrity

Data integrity is diminished through replication, duplications and transformation despite the claim that data is an asset. DOR data continually goes through changes as it is used throughout tax processing. These data replications, duplications and transformations reduce the quality of the data by introducing opportunities for system and human error. As a whole, data is not highly redundant in the Core Tax System; however, once it leaves the system it undergoes many transformations.

Recommendations

Plan to develop an enterprise-wide data quality strategy. The goal of the strategy is not to produce a report, but to build awareness and executive support for the treatment of sensitive data assets with technologies, policies and procedures that match with the regulations, the utilization and the potential loss if the data assets were to be compromised.

6.4.7 Little or No Data Documentation

DOR data is not well documented. DOR does not have or maintain a comprehensive set of documentation including: sources, owners, stewards, data management strategy, conceptual data model, logical data models, data value estimates and security assessments.

Recommendation

Created documentation across the organization that is maintained and updated.

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6.5 Business Registration Management System

This system manages business registrations. When a business establishes itself as a legal entity, a business registration application is filed. The business registration information is captured in BRMS and details such as filing frequency, tax codes, and NAICS codes are added.

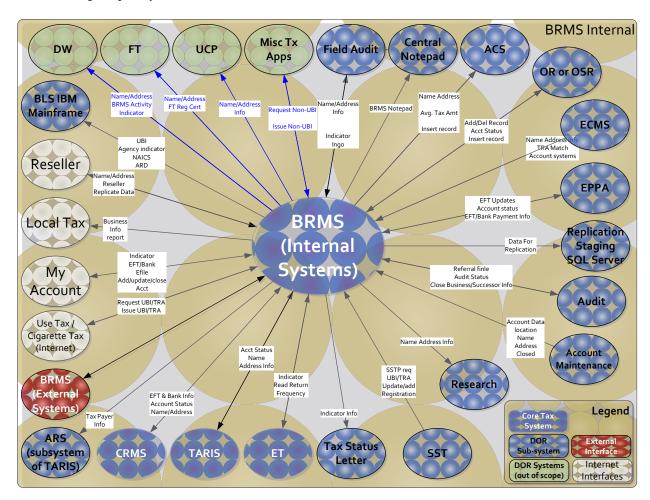


Figure 6-11: BRMS Integration Points

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Applic	ation ID	Acronyn	n -			S	System N	Name	& Applic	ation				-		Owner	
BR		BRMS	Rus	ines	s Re	σict	tratio	n Ma	anagei	men	t Sv	stem			-	yer Acco	
DIX		DICIVIS	Dus	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	J IC	5130	cratio	11 1110	illagei	iicii	t Jy	300111		Ac	lmiı	nistration	
Function		Registrat ment; Bus				- Account Maintenance - Local Tax - ACS - My Account - Audit - OSR - Central Notepad - Research - CRMS - SST - ECMS - TARIS, ARS, EPPA - Excise Tax - Tax Status Letter - Field Audit - Use Tax/Cigarette											
Busir	ness	0-	1-Mu	•	2-N	ot Re	elevant	3.	-Optional		4-Imp	ortant	5-Very	Import	ant	6-Critical	Unknown
Value	e	Redundant	: Vers	ions										•		✓	
	vable	15 minutes		4 hours (1 day)			48 hours (2 days)			hours days)			60 hours 15 days)			720 hours (30 days)	Unknown
Dow	ntime			✓													
Hard	ware	HP NSK	#HP	NSK		IBN	И		#IBM		Wind	lows Serv	er 2003				Unknown
Platf	orm	✓															
Data	base	S	QL 2005			S	QL 2008			TA	NDEM	<u> </u>		;	#TAND	DEM	Unknown
.NET		NET 4.0	NETAA				NET 0 5			#.N		# N.F		" 115		# NET 4.0	
Versi	ion	.NET 1.0	.NET 1.1	.N	IET 2.0		.NET 3.5 .NET		ET 4.0	1.1		#.NET 2.0		#.NET 3.5		#.NET 4.0	Unknown ✓
ACD			r	#.NET			#.NET MVC 1.0				#.NET MVC 3.0			Unknown			
ASP Versi	ion	Classic			#.INE I			#.INET IVIVC 1.0					###ET 1919 C 5.0			✓	
Lang		CGI	СОВО	L/										VDC / WDC			
Lang	uage	TANDEM	#COB	OL	1	#SCOBOL		#DORCL		Ci	#	JAVA / #JAVA		JCL /	#JCL	VB6 / #VB6	Unknown
Sour		Cont			TF	_		#TFS		VSS 6.0		#\		#VS	S 6.0	Unknown	
Cont		<u> </u>	-							155 5.5				,,,,,		Cinalowii	
	rting	Crvst	al Reports		Ex	Export to MS EXCEL			#Export to EXCEL			#SQL Reporting Service			rting Service	Unknown	
Kepu	orting								✓								
	mation	Public	#Public	Sensit	ive	#Se	ensitive	Confidential		Unkr	nown	Sec	urity	Secu Syst	•	Command Line Web	Unknown
Sensi	tivity									٧	/	Ser	vice	.,			✓
System	n Considera	tions		Ye	s I	No						Assessr	nent Sta	tistics			
Risk	Assessm	ent Com	plete?			√	System	n comp	onent				Pro	grams		Lines of Code	
Missi	ion Criti	cal?		✓	<i>'</i>		Batc	h pro	grams					69		133,188	
	ic Facing					✓			ogram					60	_	215,852	
Sunset or Retired?				<u> </u>	✓	Requester programs 59					98,685						
COM?					<u> </u>	Subroutines 7					2,158						
SMTP?						<u>/</u>	SQL report writer 33					3,863					
MAPI?						<u>/</u>	DORCL 52					11,659					
Uses 3rd Party SW?						<u> </u>							ment N	OTES			
Java Servlets?				√	-	_	UBI stats were compiled separately										
CDO?						<u>/</u>	Program Stats: 5, 9, 12, 0, 1, 4										
_22I2/	SSIS/DTS?										1073/	, 022/,	1406				

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6.6 Excise Tax

This system contains data from all filed excise tax returns, down to the tax return level detail, and supports all funding to the general and dedicated funds by Revenue Accounting.

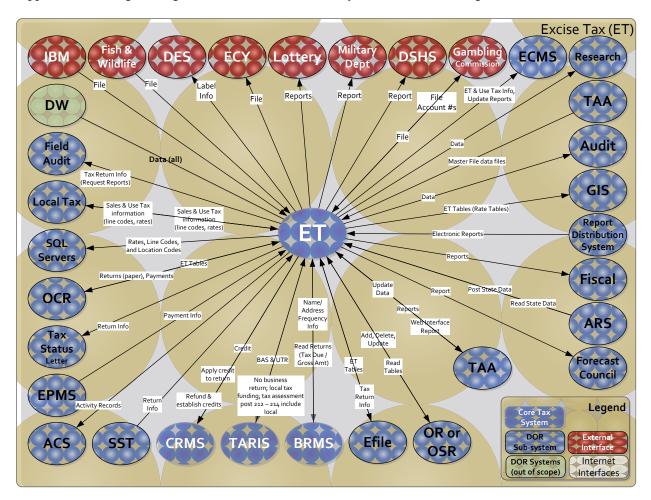


Figure 6-12: ET Integration Points

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Appli	cation ID	Acronym	<u>-</u> 1			Syst	tem Na	me &	Ар	plicatio	n						Own	er			
	ET						Ex	cise	Та	x					Taxpayer Account Administration						
Function	Excise T detail a process		PACS CRMS ARS ECMS Remote Print EPPA Audit EPMS BRMS Field Audit Central Fiscal Notepad Forecast CT Reduction Council							Local TaxMain StreetCreditMy AccountOCR					Research SST TAA TARIS Tax Status Letter E-file						
Busi Valu	0-Redundant Ver			ultiple rsions		2-Not	Relevant	:	3-0	Optional		4-In	porta	nt !	5-Ver	y Important		ritical	Unknown		
Allo	wable ntime	15 minute	S	24 hour: (1 day)			48 hou (2 days			120 h (5 da				60 hou			hours days)	•	Unknown		
Hard	lware	HP NSK	#HP	NSK		IBM			#1	IBM		Win	dows 9	Server 2	.003				Unknown		
Platf		✓											,	/							
Data	base	so	L 2005			S	QL 2008				T/	NDEN	/			#TAND	EM		Unknown		
Date	, Dasc										✓										
.NET Vers	IET .NET 1.0 .NET 1.1		. N	IET 2.	.0	.NET 3.5		.NE	T 4.0	0 #.NET 1.1			#.NE 2.0		#.NET 3.5	#.NET 4.0		Unknown			
	D Classic .N			IET			NET				NET (MVC 1				#.NET I	4)/C 2	n	Unknown		
ASP Vers	ion	Classic	.,	VC I	#.NET #.			INETI	VIVC 1	.0			#.INET I	VIVC 3.	0	✓ ✓					
Lang	uage	CGI TANDEM	COBOL ,	/ #СОВС	OL	#50	СОВОЬ		#DORCL			:#	JAVA / #JAVA		Ά	JCL / #JCL ✓	VB6	/ #VB6	Unknown		
			1 ,		_		<u> </u>					1/05 5 0									
Sour Cont		Con				TFS			#TFS VSS				VSS 6.	U		#V5	S 6.0		Unknown		
Repo	orting	Crysta	l Reports			Export	to MS E	XCEL	EL #Export to EXC					L		#SQL Reporting Service			Unknown		
	mation itivity	Public	#Public	Sensi	tive	#Ser	nsitive	Confi	dent	tial U	nkno	wn	_	ecurit ervice		Security System	Com	mand Web	Unknown		
System	n Considera	tions		Ye	15	No						^	SSASS	ment S	Statio	stics					
	Assessme		ete?	-		√	Syste	m con	npoi	nent			.55255	ciic c		grams		Lin	es of Code		
	ion Critica			✓	/					rams						143			283,197		
Publi	c Facing?					✓				grams						105			211,332		
Suns	et or Reti	red?				✓	Req	uest	er i	progra	ams					127			115,913		
СОМ	?					✓	Sub	Subroutines								6			4,284		
SMTI	?					✓	SQL	SQL report writer								94			19,646		
MAP	MAPI?					✓	DOI	DORCL 74									34,007				
	3rd Party			✓						Α	ssess	ment S	Statis	stics							
	Servlets?		_	√																	
CDO					_	✓ ✓	-														
5515/	DTS?				v																

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.7 Credit Management System (CRMS)

This system manages taxpayer refunds, credits, and special credits.

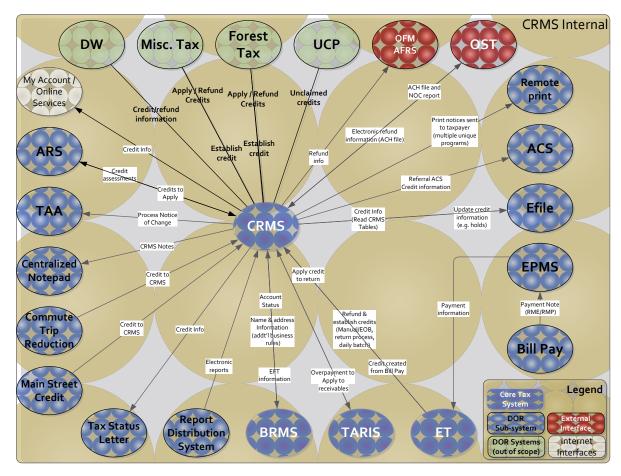


Figure 6-13: CRMS Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Applic	cation ID	Acronyı	m	Sy	stem	Name	e & App	lication						0	wner				
(CR	CRMS	S	Cred	lit M	anag	emen	t Syst	em		Ta	ахра	yer A	ccol	ınt A	dmini	stratio	on	
Function	credits, Applying Applying	nformation Refunding g credits g credits g credits	ig of Cre to tax re to receiv	dits, turns vables	, 5,	□ BRMS □ Central Notepad								 Local Tax / Main Street C My Account OSR Report Dist. System TAA TARIS, ARS & EPPA Tax Status Letter 					
Busi		0-Redunda	nt I	ultiple rsions		-Not levant		3-Optio	onal	4-Ir	nport	ant	5-Ver	y Impo	rtant	6-Cı	ritical	Unknown	
Valu	e															,	✓		
Allov	wable	15 minute	!S	24 hour			48 hours		120 h				hours			720 hour		Unknown	
Dow	ntime			(1 day) ✓	<u> </u>		(2 days)		(5 d	aysj		(13	days)			(30 days)		√	
Hard	lware	HP NSK	#HP	NSK		IBM			#IBM	١	Vindo	ows Sei	rver 200	3				Unknown	
Platf			,	/					✓			✓							
Data	base	S	QL 2005			SC	L 2008			TANDE	M				#TANE	DEM		Unknown	
										✓									
.NET		.NET 1.0	.NET 1.	1 .N	ET 2.0	.N	IET 3.5	.NE	T 4.0	#.NET	1.1	#.N	ET 2.0	#.NET 3.5		#.N	ET 4.0	Unknown	
Version							\checkmark												
ASP	ASP Classic .NET			ET		#.NE	т		#	.NET MVC	1.0				#.NET	MVC 3.0)	Unknown	
Vers	ion		•																
Lang	uage	CGI	СОВС	DL / #CO	BOL #SCOBOL			#DC	#DORCL (JAVA / #JAVA		JCL / #JCL		VB6 / #VB6		Unknown	
		TANDEM			<u>√</u>		√	,	/	√			√	✓					
Sour	CO	Coi	ntrol		TFS			#1	rfs	VSS 6.0			#\			SS 6.0		Unknown	
Cont		,	/					,	/										
	orting					_													
перс	, ting	Cryst	al Reports			Export	to MS EX	JEL	L #Export to EXCEL					#3	оці керс	orting Se	rvice	Unknown	
Infor	mation	Public	#Public	Sensi	itivo	#\$0	nsitive	Confid	lential	Unknow	'n	Secu	witz	Sec	urity	Com	mand	Unknown	
Sensi	itivity	i ubiic	III donc	301131		,,,,,	IIIIII E	COIIIIC		Onknow	_		vice		stem ✓	Line	Web	CHRIIOWH	
											_								
	n Considera Assessme		oloto2	Y	es	No ✓	Suctor	n compo	nont		Ass	sessm	ent Sta	tistics rogra			13-	es of Code	
	ion Critic		лесет		/	•		h prog					Р		90			140,289	
	c Facing?					√			grams						13			83,046	
	et or Reti					✓			·						18			55,012	
СОМ					1	✓	Requester programs 48 Subroutines 7								7,601				
SMT						✓	SQL report writer 18								1,909				
MAP	MAPI?					✓	DOR							2	27			8,409	
Uses 3rd Party SW?						✓					A	ssessn	nent No	OTES					
Java Servlets?					/														
CDO?						✓													
SSIS/	DTS?			,	/														

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.8 Tax Accounting Receivable System

This system manages taxpayer receivables by assessing tax liabilities, penalties, interest and accounting for payments until paid in full or written off as uncollectible.

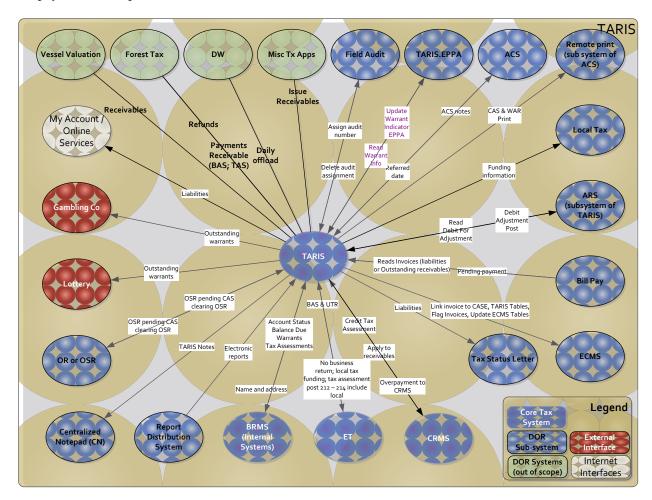


Figure 6-14: TARIS Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Application ID	Acrony	/m				System N	Name	& Applic	ation						Owner						
	·		т							امما	C	_	Taxpayer Account								
TA	TAR	15	ıax	ACC	ou	nt Rece	ıvaı	oie inte	egrat	ea	Systen	1	Administration								
Tax Acco	ounts Re	eceival	ole				& Remo	te Pr	0	□ Field Audit											
Informat	tion – P	osting	of Ta	ЭX		Si a	Bill F	•					Local	Tax							
receipts			C C											ccour	nt						
receipts						erf			epad				OSR								
표			CRMS ECMS										Report Dist. SystemTARIS, ARS, & EPPA								
				ET TAKIS, AKS, & F																	
Business	0-Redund	lant 1-	Multipl	e ,	2-Not	t Relevant		3-Optiona		4-1	mportant		ery Imp		6-Critical	Unknown					
Value	0-Reduiic	laiit \	ersions	-	Z-INU	t Relevant		3-Optiona	•	4-1	important	3-70	ery mip	Ortant		Olikilowii					
			241			40.1		420.1			1 200			_	√						
Allowable	15 minu	tes	24 ho (1 da			48 hours (2 days)		120 h (5 d				hours days)			'20 hours (30 days)	Unknown					
Downtime						✓															
Hardware	HP NS	К #	HP NSK	(IBM		#IBM		1	Windows Se	rver 20	003			Unknown					
Platform			✓								✓										
Database		SQL 2005				SQL 2008			1	AND	EM			#TAN	NDEM	Unknown					
	✓												•	/							
.NET	.NET 1.0	.NET 1	.1	.NET 2.0)	.NET 3.5		NET 4.0			.1 #.NE	#.NET 2.0		ET 3.5	#.NET 4.0	Unknown					
Version		✓								✓	•		,	/							
ASP	ASP Classic .NI				#.N	NET		;	1VC 1	0			#.NET N	MVC 3.0	Unknown						
Version		✓	•																		
Language	CGI	COE	OL / #0	COBOL		#SCOBOL		#DORCL	C#		Java / #J	AVA	JCL / #JCL		VB6 / #VB6	Unknown					
0 0	TANDEM			√		√		<u>√</u>	√			√			√						
Source	Co	ntrol			TFS			#TFS		VSS 6		6.0		#VS	S 6.0	Unknown					
Control		√						<u>√</u>	100 0.0				<u> </u>								
Reporting	Cryst	tal Report	3	E	xpor	t to MS EXCI	EL		#Ехр	ort to	EXCEL	EL #SQL			ting Service	Unknown					
						√															
Information	Public	#Public	Sen	sitive	#5	Sensitive	Con	fidential	Unkno	own	Secur	ity	Secu Syst		Command Line Web	Unknown					
Sensitivity		✓				✓		✓			Servi	ce	· •	1							
System Considera	tions		Yes	N	0					As	sessment	Statist	tics								
Risk Assessme		olete?			7	System co	ompo	nent					grams		Lin	es of Code					
Mission Critica	il?		✓			Batch	prog	rams					160			244,647					
Public Facing?				٧		Server	pro	grams					87			239,207					
Sunset or Reti	red?			~		Reques	ster	prograi	ns				66			77,925					
COM?	COM?						Subroutines									764					
SMTP?	SMTP?					SQL re	•	writer					44			8,439					
MAPI?						DORCL							46			19,041					
Uses 3rd Party		√		_					Α	ssessment	NOTI	ES									
Java Servlets?		√	\perp	_																	
CDO? SSIS/DTS?			Ľ		-																
3313/013!																					

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.9 Outstanding Returns

This system tracks each tax return, based on the taxpayer's filing frequency, as outstanding until the return is filed or otherwise cleared.

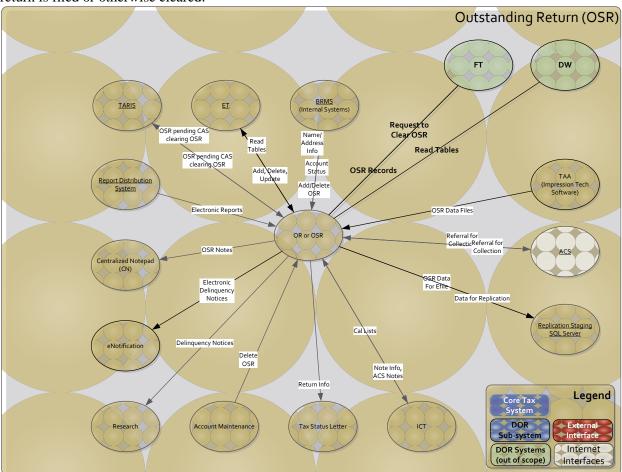


Figure 6-15: OSR Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Application II) Acronyr	n			Sv	rstem N	ame &	Applic	atio	n					Owner		
OR	OSR			_	Jy			ding			\C		Compliance				
OK	USK				_			uilig	ĸe	tuii	15				Compilant	Le	
Keeps Fores	anding ret s track of E t tax retur he departr	xcise tax	x and	and BRMS							0	Fore My A ORF TAR					
Business Value	Redundant Version				ot Rele	evant	3-0	Optional		4-Imp	ortant	5-Very	Import	tant	Unknown		
Allowable	15 minute	ς	24 hours (1 day)			48 hours (2 days)			hour days)			60 hours 15 days)			720 hours (30 days)	Unknown	
Downtime			<u>√</u>			(L ddys)		(3	uuys,			15 44457			(So days)		
Hardware	HP NSK	#HP	NSK		IBM			#IBM		Wind	lows Serv	er 2003				Unknown	
Platform	✓																
Database	S	QL 2005			SQ	L 2008			Т	ANDEM				#TAND	EM	Unknown	
						✓								✓			
.NET	.NET 1.0	.NET 1.1	N	IET 2.0	.N	IET 3.5	.NET	۲ 4.0		NET 1.1	#.NE	Т 2.0	#.NE	T 3.5	#.NET 4.0	Unknown	
Version																✓	
ASP	Classic	.NE	т		#.NET	Т		1	.NET	MVC 1.	0			#.NET	MVC 3.0	Unknown	
Version														✓			
Language	CGI TANDEM	COBC #COB	•	#	SCOBO	OL	#DORCL			C#	JAVA / #JAVA		JCL / #JCL		VB6 / #VB6	Unknown	
		✓			√		✓			√ VSS 6.0							
Source Control	Cont			TFS	<u> </u>		#TFS			\			#VS	Unknown			
Reporting	Crys	tal Reports		Ex	port to	o MS EXC	CEL #Export to EXCEL					#SQL Repo			rting Service	Unknown	
															2		
Information	Public	#Public	Sensi	tive	#Sen	nsitive	Confid	ential	Unl	known	Sec	urity		urity tem	Command Line Web	Unknown	
Sensitivity							~	/			Ser	vice				✓	
System Consid	erations		Ye	s N	lo					Α	ssessm	ent Stati	stics				
Risk Assess	ment Con	nplete?		٧	/	System	compo	nent				Pro	grams	s	Lin	es of Code	
Mission Cr	itical?		✓			Batch	prog	grams					21	L		30,993	
Public Faci					_	Serve	•						8	_		21,149	
Sunset or I	Retired?				_	Requ		<u> </u>	ram	ıs			12	_		14,837	
COM?					_	Subro							C	_		0	
SMTP?					_	SQL r	•	twrit	er				2	_		153	
MAPI?	orty SW2					DORG	-L				A 005 55	l ant NC	Ç	,		5,270	
Uses 3rd P Java Servle			_		-						Assessn	nent NO	155				
CDO?			Ť	_	$\overline{}$												
SSIS/DTS?																	
0010/1510.																	

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.10 Automated Compliance System

This system allows Revenue Agents to manage items referred for collection by tracking TARIS invoices and outstanding returns from the OSR system.

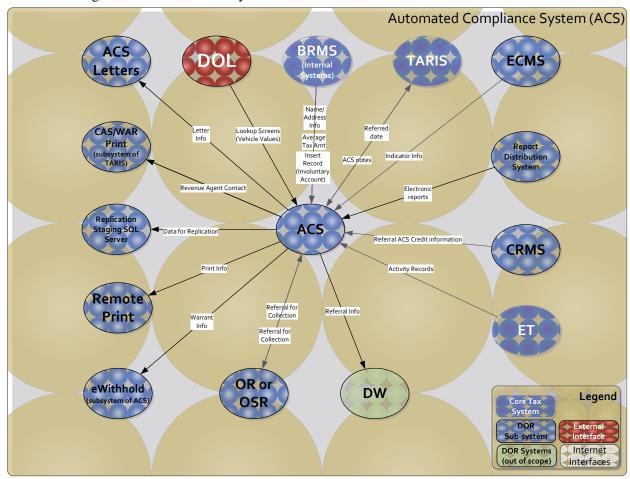


Figure 6-16: ACS Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Application ID	Acro	nym				System	Nan	ne & A	Applic	atio	on				С	Owner			
AC	^	CS					atomated Compliance Compliance												
AC	A	CS					Sy	stei	m					C	om	ipiiance			
Function	Referra	l of aco	coun	t info	ormat	ion of	In	terfa	aces		■ BRN	/IS - I	Busine	ss Regist	rati	ion;			
	delinqu	ent tax	xes o	wed	. Inclu	ding		■ OR - Outstanding Return;											
	special														ınt	Receivabl	е		
	tax, list			nter	(ICT)	nitial						_	ed Syst	-					
	Contact	Leam											se Tax	se;					
													-	ent of Li		team serv	/er)		
Business	O Dodunda	1-	Multip	le	2 Nat F	alayant	Т	2.0=4	ional								,		
Value	0-Redunda	ant V	ersion	s	2-Not F	elevant		3-Opt	ionai		4-Impor	tant	5-very	Important		6-Critical	Not Rated		
				4			\perp								L		√		
Allowable	15 minute	25	4 hour (1 day)			ours ays)		120 h (5 da				60 hou 15 day				ours lays)	Unknown		
Downtime																	✓		
Hardware	HP NSK	#	HP NS	К	IB	М		#IB	вм				Window	Server 200	3		Unknown		
Platform	✓																		
Database	s	QL 2005				SQL 200	8				TANDEM			#TAN	NDEI	М	Unknown		
		✓												•	/				
.NET	.NET 1.0		NET	.NI	ET 2.0	.NET 3	3.5	.NE	T 4.0		#.NET 1.1	#.	NET 2.0	#.NET 3.	#.NET 3.5 #.NE		Unknown		
Version		-	1.1														√		
ASP	Classic		.NET			.NET				#.NI	ET MVC 1.	0		#.NE	ТМ	IVC 3.0	Unknown		
Version	5.035.0																✓		
	CGI TANDI	M CC	DBOL	#0	OBOL	#\$C	OBOL		#DOR	^I	C#		JAVA	JCL		VB6	Unknown		
Language	CGITANDI		√	#0	#COBOL	<u>√</u>					#DOK	<u></u>	C#		JAVA	JCL		VBO	Olikilowii
Source	Co	ontrol			TFS	<u> </u>		#TFS			VSS 6.0		0	#VSS 6.0			Unknown		
Control							#113									√			
	Crve	stal Repo	rts		Fxi	ort to M	S EXC	EVCEI #Evnor			xport to E	port to EXCEL			#SQL Reporting Service				
Reporting	Ci y.	otal Repo	1.0		EA	<u>√</u>	LAC				KPOIT TO EX	ACLL		пост перо	35	5 Jei vice	Unknown		
Information	Public	#Public		Sensiti	vo #	Sensitive		onfiden	tial	Hn	known	Sad		Security	,	Command	Unknown		
Sensitivity	rubiic	#FUDII		Jensiu	ve #	Sensitive		omiden	itiai	OII	√ ×		curity rvice	System		Line Web	√ VIIIIOWII		
			_								<u> </u>		10100						
System Considera				Yes	No						As	sessn	nent Sta						
Risk Assessm		nplete	??		√	_		ompo					P	rograms		Lin	es of Code		
Mission Criti					√	_		prog						51			91,945		
Public Facing					✓ ✓	_		prog						30			42,051		
Sunset or Re COM?	tirea?		_		∨			ster utine		rat	115			33 5			35,683		
SMTP?					V ✓	_		port		0"				17			3,113 3,123		
MAPI?					▼		RCI	•	WII	CI				27			5,697		
Uses 3rd Par	d Darty SM2				\ \ \ \	100	nci	_			Λ	SSASS	ment No	<u> </u>			3,037		
Java Servlets			-	√	+						A	33633	ment ivi	J. L.J					
CDO?	•			•	/	+													
SSIS/DTS?					\ \ \	+													
יטוט/טוט:																			

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.11 E-file

This system allows taxpayers to file tax returns electronically and includes upfront validation rules to decrease the number of tax returns with errors.

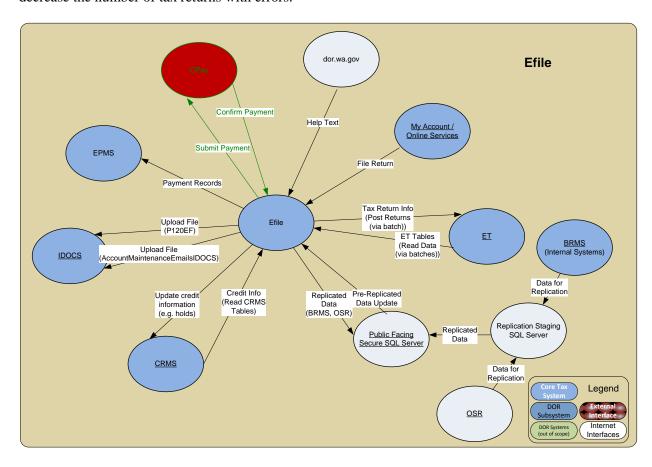


Figure 6-17: E-file Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Application ID	Acronym	<u>.</u>			System N	ame 8	k Applica	tion				_		0\	wner	
EF	e-File		-	Ele	ctroni	c Fil	ing (C	ЕТ	R e-	File)			-	ayer . nistr		
Electroi Tax Ret	_	of Comb	ined Exci	ed Excise CRMS Public Facing Secure Excise Tax DOR.WA.GOV									e SQL			
Business Value	0-Redundan		Iultiple rsions	2-No	t Relevant	3	3-Optional		4-lm	oortant	5-Ver	y Impor	tant		itical	Unknown
Allowable Downtime	15 minutes		24 hours (1 day)		48 hou		(5	hours days)	S		60 hours 15 days)			720 hou (30 day	rs	Unknown
Hardware Platform	HP NSK	#H	P NSK		IBM		#IBM		Wind	dows Ser	ver 2003					Unknown
Database		SQL 2005 ✓			SQL 2008			Т	ANDEN	1		ı	#TANI	DEM		Unknown
.NET Version	.NET 1.0	.NET 1.1	.NET 2	.0	.NET 3.5	.N	ET 4.0		NET L.1	#.NE	T 2.0	#.NE	T 3.5	#.NE	T 4.0	Unknown
ASP Version	Classic		IET /		#.NET		#	#.NET	MVC 1.	0		#.NET MVC 3.0				Unknown
Language	CGI TANDEM	COBOL	#COBOL	#5	SCOBOL	#1	OORCL		C#	JAVA /	JAVA / #JAVA		#JCL	VB6	/ #VB6	Unknown
Source Control	Contr	ol		TFS ✓		1	#TFS		VSS 6.0			#V				Unknown
Reporting	Crysta	l Reports		Expor	to MS EXC	EL		#E	xport to	EXCEL	#SQL Rep			porting Service		Unknown
Information Sensitivity	Public	#Public	Sensitive	;	#Sensitive	Conf	fidential	Unl	known		urity vice		urity tem		mand Web	Unknown
System Considera	tions		Yes	No						Assessm	ont Stat	tictics				
Risk Assessm Mission Critic	ent Com	plete?	√	√	Syster		ponent Ograms			133633111	1	rogram	s		Lin	es of Code
Public Facing	?			✓	_		ogram									
Sunset or Re	tired?			✓	Requ		er prog nes	ram	IS							
SMTP?				√	SQL	repo	rt writ	er								
MAPI? Uses 3rd Par	ty SW2			✓	DOR	CL				Assessn	nent No	OTFS				
Java Servlets			✓	•	_	Service	: Paymen	t Ser			ient NC	7112				
CDO?				√												
SSIS/DTS?				✓												

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

6.12 ECMS

Used by Tax Discovery agents to identify and track non-registered businesses. Once registered the ECMS case is linked to the UBI # on BRMS. When an invoice is generated the ECMS case is linked to the invoice on TARIS.

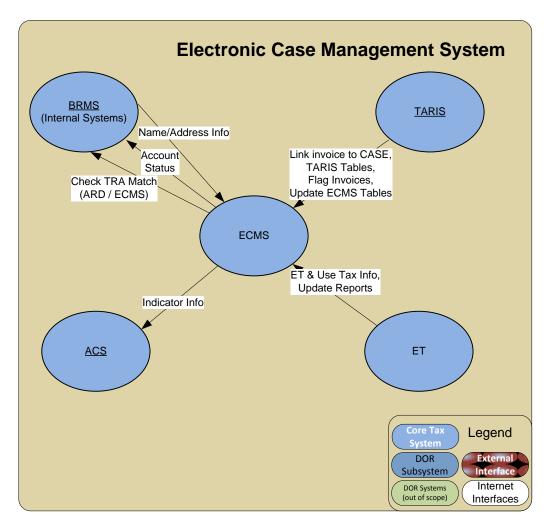


Figure 6-18: ECMS Integration Points

Core Tax System Replacement Study	Version: 3.0
Current State Assessment	Date: 12/31/12

Application ID	Acronym			Cv	stem Nan	20 P. A	nnlicati	on					(Owner				
Application 15	ACTOTIVITI				ctronic				τem	ant								
CM	ECMS			LIC		sten		mag	gemi			Compliance						
Function	Head by	the Tay	, Disco) (O K)			erface	_	- D	RMS								
Function	Used by					int	errace	S	• E									
	agents v		_						_	ı ARIS								
	illiulligs	on pou	entiai	ιαχμ	ayers.				- 1.									
Desciones	0-	1-Mult	inle															
Business Value	Redundant		-	2-Not	t Relevant	3	-Optiona		4-Imp	ortant	5-Ver	y Impo	ortant	6-Critical	Not Rated			
value															✓			
Allowable	15 minutes		l hours 1 day)		48 hours (2 days)	3		hours days)	1		0 hours 5 days)			0 hours 0 days)	Unknown			
Downtime		,	ı uayı		(2 days)		(3)	ua y s j		(-	.5 uaysj		(3	√ √				
Hardware	HP NSK	#HP N	SK		ВМ		#IBM			,	Vindows	Server	2003		Unknown			
Platform		✓																
	so	L 2005			SQL 2008			т	ANDEM				#TANDE	M	Unknown			
Database					041 2000			•	√			•		···				
.NET	.NET 1.0	.NET 1.1	.NET	2.0	.NET 3.5	N.	ET 4.0		.NET 1.:	1 4	NET 2.0	4 8	NET 3.5	#.NET	Unknown			
Version	.NET 1.0	.NEI 1.1	.INE I	2.0		.IV	E1 4.U	#	·INEI 1	1 #	NEI Z.U	#.10	NE 1 3.3	4.0	Unknown			
			<u> </u>		✓			<u> </u>										
ASP	Classic	.NET		#	.NET		#.NET MVC 1.0						#.NET N	/IVC 3.0	Unknown			
Version		√																
Language	CGI TANDEM	COBOL	#COBOL		#ЅСОВО	DL	#DORCL		C#		#JAVA	JAVA		VB6	Unknown			
			v	/			✓		~	/	✓							
Source	Cont	rol		TFS	5		#TFS			VSS 6.0	SS 6.0 #VSS 6.0				Unknown			
Control	?	ı		✓	•													
Reporting	Crysta	l Reports		Evno	ort to MS EXC	`FI	t #Evnort t				rt to EXCEL			#SQL Reporting				
	Ciysta	Пероп		LAPO	√	,LL		""	-xport t	O EXCEL	Service				Unknown			
					•							Coo		Cammand				
Information	Public	#Public	Sensitiv	e #	Sensitive	Confi	dential	Un	known	Sec	urity		urity stem	Command Line Web	Unknown			
Sensitivity						•	/			Sei	rvice				✓			
System Considera	tions		Yes	No					A	ssessme	nt Statis	tics						
Risk Assessm	ent Com	plete?		✓	Systen	n comp	onent				Pro	grams	5	Lin	es of Code			
Mission Criti	cal?			✓	Batc	h pro	grams					10)		18,449			
Public Facing	?			✓	Serv	er pro	gram	s				9)		64,712			
Sunset or Re	tired?			✓	Requ	iestei	prog	ram	S			0)		0			
COM?				✓	Subr	outin	es					0)		0			
SMTP?			✓ SQL report writer 0							0								
MAPI?				✓	DOR	CL						11	-		3207			
Uses 3rd Par	ty SW?			✓					I	Assessm	ent NOT	ES						
Java Servlets	?		✓															
CDO?				✓														
SSIS/DTS?				✓														

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6.13 IDOCS

This system is the agency-wide imaging system. All tax returns and correspondence coming into DOR are captured here and are available to most users.

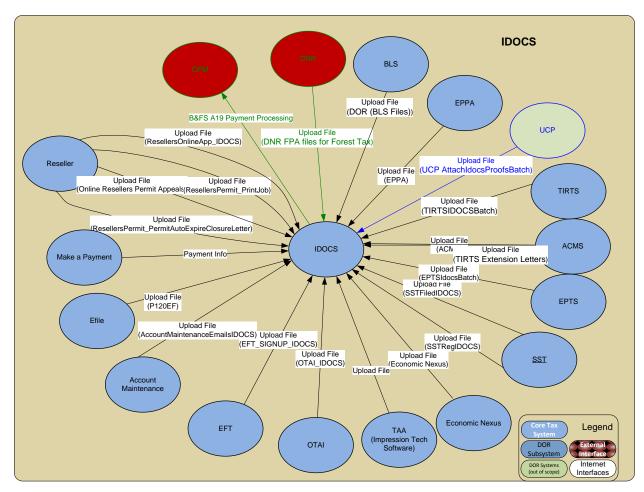


Figure 6-19: IDOCS Integration Points

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Application ID	Acror	ıym			System I	Name 8	& Applio	catio	on				Owner			
IC	IDO	CS			I	magi	ing Sy	yst	em	em						
Function	Agency-v processin correspo inventor name an	Inte	faces		■ SYS N	IAME	- inte	erface								
Business	0-Redundan	t 1-Multi Versio		2-Not R	elevant	3-0	Optional		4-Importa	nt 5	-Very I	mportant	Not Rated			
Value Allowable	15 minutes	24 hou (1 da		48 h (2 d			0 hours days)) hours 6 days)			0 hours 0 days)	Unknown		
Downtime		, , , , ,	,,	, -	, , ,		,,,			, ,			, . ,	✓		
Hardware Platform	HP NSK	#HP N	SK	IB	М		#IBM			Wir	ndows	Server 2003		Unknown		
Database		L 2005			SQL 2008			ļ	TANDEM			#TAN		Unknown		
NET		.NET										·				
.NET Version	.NET 1.0	1.1	۱.	IET 2.0	.NET 3.	5 .	NET 4.0		#.NET 1.1	#.NET	Г 2.0	#.NET 3.5	#.NET 4.0	Unknown ✓		
ASP	Classic	.NE	Т	#	.NET			#.NI	ET MVC 1.0			#.NET	Unknown			
Version										✓						
Language	CGI TANDEN	/ COBOL	#(COBOL	#SCO	OL	#DORCL C#		C#	JAVA		JCL	VB6	Unknown		
Source Control	Con	trol		TFS	<u> </u>	#TFS		VSS 6.0			#\	Unknown ✓				
Reporting	Cryst	al Reports		Ехр	ort to MS	EXCEL		#Ex	xport to EXC	to EXCEL		#SQL Reporting Service		Unknown		
Information Sensitivity	Public	#Public	Sensit	ive #5	Sensitive	Confid	dential	Un	known	Secur		Security System	Command Line Web	Unknown		
,									✓	Servi	ce			✓		
System Considera		1 . 2	Yes	No					Asse	essmen						
Risk Assessm Mission Critic		pieter		✓	_		ogram				Pro	ograms 51	Lir	91,945		
Public Facing				▼	_		ogran					30		42,051		
Sunset or Re				√		<u> </u>	r prog		ms			33		35,683		
COM?				√		routi		,				5		3,113		
SMTP?				✓			rt writ	ter				17		3,123		
MAPI?				✓	DOF	RCL						27		5,697		
Uses 3rd Part	-			✓					Ass	sessme	nt NO	TES				
Java Servlets	?		✓													
CDO?				√												
SSIS/DTS?				✓												

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6.14 Audit Review System (ARS)

This system is used to issue tax assessments from Audit, TAA, Compliance, and Special Programs. This system handles the final review for a credit or debit assessment. Once created the taxpayer is billed or refunded.

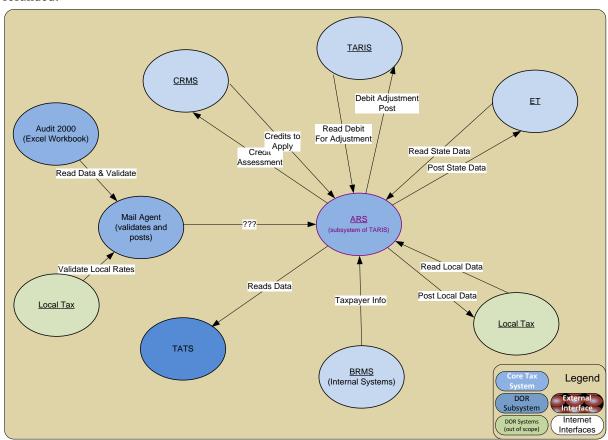


Figure 6-20: ARS Integration Points

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Application ID	Acrony	/m				System	Nam	ne & Annl	icatio	n			-		(Owner			
	Acronym System Name & Application Owner Tax Account Receivable Integrated																		
TA	TARI	S						stem							-	Audit			
					Aud	lit Rev		v Syste	em	(AR	S)								
Function							terfaces			nknow	n or N	lot A	pplica	able	e)				
Business	0-Redund	nant i	Multiple		2-Not R	televant		3-Optiona		4-Ir	nportant	5-Ve	ry Impo	ortant	6-0	Critical	Not		
Value		V	ersions										.,				Rated ✓		
Allowable Downtime	15 minu	tes	24 hou (1 da			48 hours (2 days)		120 h (5 da				0 hours 5 days)			20 hou 30 day		Unknown		
Hardware	HP NS	к #	HP NSK		IBI	м	_	#IBM			,	Vindows	Server	2003			Unknown		
Platform			✓										√						
Database		SQL 2005			S	QL 2008			1	ANDE	M			#TANE	DEM		Unknown		
										✓									
.NET	.NET 1.0	.NET 1.	1 .	NET 2.0		NET 3.5	۱.	NET 4.0	#.1	NET 1.1	L #.N	ET 2.0	#.NE	T 3.5	#.N	IET 4.0	Unknown		
Version																	✓		
ASP	Classic	.NE	г		#.NE	Г			#.NET	MVC 1	.0		1	#.NET N	IVC 3	.0	Unknown		
Version																	✓		
Language	CGI TANDE M	совоі	. 4	#СОВОІ				#DORC	OORCL C#		C# #JAVA		#JCL		#JCL		VB6		Unknown
-										Wasa					v				
Source Control		ntrol ✓			TFS			#TFS ✓		VSS 6.0			#VSS 6.0			Unknown			
Reporting	Cryst	tal Reports		E	xport t	o MS EXCE	L	#Export to EXCEL			#SQL Reporting Service			Unknown					
						✓													
Information Sensitivity	Public	#Public	Sens	itive	#Se	nsitive	Con	fidential	Unl	known		urity rvice	Secu Syst	tem		nmand e Web	Unknown		
System Considera	tions			Yes	No					-	Assessme	nt NOT	ES						
Risk Assessme		plete?			✓			m goes do sustained		ow mai	ny minute	s or day		the ass	socia	ted bus	ness		
Mission Critica	il?			√		, 4,1,0,10		_ 40 . 411104		J. 4 C									
Public Facing?					✓														
Sunset or Reti	red?				✓														
COM?				✓		-													
SMTP?				✓	✓	-													
MAPI? Uses 3rd Party	SW2			✓		-													
Java Servlets?	SW:			-	√														
CDO?				√															

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SSIS/DTS?	✓	

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6.15 Field Audit (Transcript System)

This system allows Audit to assign an audit number to a taxpayers account and assign the audit to an Auditor.

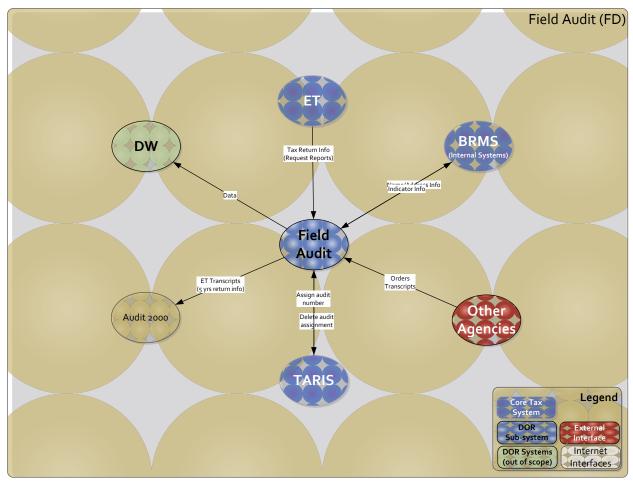


Figure 6-21: Field Audit Integration Points

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Application ID	Acronym	<u> </u>			Syst	em Nam	ne & A	pplication	n					C	Owner	
FD	FD		Field Aug						t	Audit						
Function	Audit's audit nu to requ	ımber t	o an	acco			Int	 ARS Audit Review, Excise Tax, Business Registration, Data Warehouse. 								
Business Value	0- Redundant	1-Mul Versi		2-N	lot Re	elevant	:	3-Optional		4-Imp	ortant	5-Ver	/ery Important 6-Co			Not Rated ✓
Allowable Downtime	15 minutes		4 hours (1 day)			48 hours (2 days)			nours ays)			50 hours 15 days)			0 hours 0 days)	Unknown
Hardware	HP NSK	#HP N	NSK		IBM			#IBM				Windows	Server 2	2003		Unknown
Platform		✓	,													
Database	sq	L 2005			SC	QL 2008			T.	ANDEM			#	TANDE	М	Unknown
										✓						
.NET	.NET 1.0	.NET 1.1	.NI	ET 2.0		.NET 3.5	۸.	IET 4.0	#	.NET 1.1	L #	.NET 2.0	#.NE	T 3.5	#.NET 4.0	Unknown
Version																✓
ASP	Classic	.NET			#.NE	Т			#.NE	.NET MVC 1.0			#.NET MVC 3.0		MVC 3.0	Unknown
Version																✓
Language	CGI TANDEM	COBOL	#0	СОВОЬ		#SCOBO	DL	#DORC	L	Ci	#	#JAVA	#	#JCL	VB6	Unknown
		✓				✓		✓		~	/					
Source	Con	trol		1	ΓFS			#TFS VSS 6.0				#VS	S 6.0	Unknown		
Control	~															
Reporting	Crysta	l Reports		Ex	port	to MS EXC	EL		#1	Export to	EXCEL		#SQL Reporting Service			Unknown
																✓
Information	Public	#Public	Sensit	ive	#Se	nsitive	Conf	idential	Un	known	Sec	urity	Secu		Command	Unknown
Sensitivity								√				rvice	Syste		Line Web	
System Considera	tions		Yes	5 1	No					Д	sessme	nt Statis	tics			
Risk Assessm		plete?			✓	System	comp	onent					grams		Lin	es of Code
Mission Critic				,	/	Batcl	n pro	grams					37			63,399
Public Facing	?			١,	✓			ograms	s 12					17,546		
Sunset or Ret	ired?				✓	prog	rams							16,770		
сом?					/		broutines			0					0	
SMTP?					<u>/</u>		report writer			0					0	
MAPI?	W SWA				✓	DOR	Assessment NOTES						406			
Uses 3rd Part Java Servlets					✓					A	ssessm	ent NOT	25			
CDO?	•			_	∨											
SSIS/DTS?					· /											
יכום (כוככ:																

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7. Costs

The below table represents DOR's current state Core Tax System costs.

	Obj.		Compliance				Total Core Tax
Expenditures	Codes	Audit Costs	Costs	I.S. Costs	TAA Costs	TPS Costs	Costs
Salaries and Wages	Α	15,744,000.00	10,214,800.00	6,096,192.00	6,724,600.00	2,721,600.00	41,501,192.00
Employee Benefits	В	5,259,800.00	3,543,100.00	1,721,610.00	2,354,200.00	906,900.00	13,785,610.00
Consulting Services	С	420,000.00	0.00	0.00	0.00	0.00	420,000.00
Goods and Services							
Supplies	EA	31,000.00	31,250.00	18,300.00	17,100.00	7,000.00	104,650.00
Communications	EB	334,000.00	402,900.00	372,000.00	471,200.00	243,200.00	1,823,300.00
Utilities	EC	57,000.00	48,700.00	84,600.00	52,000.00	18,000.00	260,300.00
Rented and Leased Space	ED	1,558,300.00	1,234,900.00	344,400.00	527,700.00	239,600.00	3,904,900.00
Repairs and Maintenance	EE	20,000.00	32,700.00	182,400.00	36,000.00	5,000.00	276,100.00
Printing	EF	35,100.00	33,500.00	12,300.00	251,100.00	54,200.00	386,200.00
Training and Dues	EG	41,000.00	8,500.00	61,200.00	4,500.00	5,000.00	120,200.00
Rental Equipment	EH	66,000.00	97,000.00	18,720.00	26,000.00	14,000.00	221,720.00
Subscriptions	EJ	9,000.00	85,500.00	2,400.00	10,000.00	2,000.00	108,900.00
System Costs	EL	0.00	0.00	498,780.00	0.00	0.00	498,780.00
Personnel Services	EN	69,000.00	51,800.00	37,260.00	32,160.00	14,700.00	204,920.00
Purchased Services	ER	101,000.00	64,000.00	179,400.00	20,000.00	20,000.00	384,400.00
Software Maintenance & Leases	EY	30,000.00	37,500.00	805,980.00	121,000.00	35,000.00	1,029,480.00
Other	EZ	6,000.00	240,400.00	5,400.00	12,600.00	40,000.00	304,400.00
Travel	G	1,000,000.00	100,000.00	9,600.00	500.00	9,000.00	1,119,100.00
Equipment	J	30,000.00	10,000.00	543,000.00	289,115.00	10,000.00	882,115.00
TOTAL		24,811,200.00	16,236,550.00	10,993,542.00	10,949,775.00	4,345,200.00	67,336,267.00
FTE'S		292.00	202.40	85.98	138.20	51.70	770.28

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Appendix A – Acronyms

ACH – Automated Clearing House

ACS - Automated Compliance System

AFB - Adjustment to Face for Bankruptcy

AFRS - Agency Financial Reporting System

AG – Attorney General

ARS – Audit Review System

ART - Automated Return Adjustment

ARD - Agency Required Documentation

ASP - Audit Standards and Procedures unit

B&O - Business and Occupation

BAS - Balance Assessment

BCS - Batch Control System

BLA – Business License Application

BLS - Business Licensing Service

BRMS - Business Registration Management System

CAS - Compliance Assessment

CJ – Cash Journals

CRMS - Credit Management System

CRRS - Cash Receipts Reporting System

CRRT - Compliance Review Recovery Team

CSP - Certified Service Provider

CTR - Commute Trip Reduction

DBA - Doing Business As

DFW – Department of Fish and Wildlife

DNR – Department of Natural Resources

DOA - Department of Archeology

DOL - Department of Licensing

DVI - Dollar Value Indicator

ECMS – Electronic Case Management System

ELF – Electronic Filing

EOB - Error Out of Balance

EPMS - Electronic Payment Management System

EPPA - Electronic Payment Plan Agreement

ESD - Employment Security Department

ET – Excise Tax System

FEIN – Federal Employer Identification Number

FI - Financial Institution

FTP - File Transfer Protocol

ICAP - Image Capture and Process

IDOCS - Integrated Document System

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IRS - Internal Revenue Service

IS – Information Systems

JV - Journal Voucher

LINUS - LNI System

LNI - Washington State Department of Labor and Industries

LCB - Liquor Control Board

MLS – Licensing System

NAICS - North American Industry Classification System

NOC – Notice of Change

NOWD - Notice of Order to Withhold and Deliver

NSF - Non Sufficient Funds

OSR – Outstanding Returns File

OTP - Other Tobacco Products

SL - Streamline

SOS - Office of the Secretary of State

SSN – Social Security Number

OST - Office of State Treasurer

STP – Streamline Tax Program

SST - Streamline Sales Tax

REET - Real Estate Excise Tax

RRS – Revenue Receipting System

TAA - Taxpayer Accounting Administration

TARIS - Tax Accounts Receivable Integrated System

TAS – Tax Assessment

TATS – Tax Assessment Tracking System

TAXIS - ESD Tax System

TIS – Tax Information Specialist

TFA - Trust Fund Assessment

TM\$ - Treasury Management System

TSR - Tax Service Representative

UBI - Unified Business Identifier

UTR - Unpaid Tax Return

WSGC - Washington State Gambling Commission

WSL – Washington State Lottery

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Appendix B – Current State Meetings

DOR Core Tax System Replacement Current State Walkthrough Meetings

Business Process/Topic	DOR Attendees	Date	Time	
Registration	Tara Morey	September 19, 2012	9:30 a.m11:30 a.m.	
Returns Processing	Heather Schmidt, and Debbie Vankirk	September 20, 2012	10:00 a.m 12:00 p.m.	
Cash Management	Tom Garden, and Chris Vough	September 26, 2012	9:00 a.m11:00 a.m.	
Audit	Kim Deyo, Pat Gillespie, Bryan Kelly, and Denine Lathrop		8:30 a.m11:00 a.m.	
Compliance	Andrea Eason, Bobbie Carter, and Chris Waite	September 27, 2012	1:00 p.m3:30 p.m.	
Revenue Accounting	Robin Johnson, Ayano Faasuamalie, and Binh Vu	October 2, 2012	9:00 a.m11:00 a.m.	
Reseller Permit, Cash Bonds, Warehouse Credits	Michelle Hunt, Lorraine Johnson, and Adam Shierenbeck	October 3, 2012	10:00 a.m12:00 p.m.	
Warrant Team	Katherine Ataman, Jamie Sayer, and Brenda Smith	October 3, 2012	1:00 p.m3:00 p.m.	
Special Credits	Jessica Hicks, Yvonne Quijano, Renee Rhodes, Brenda Smith, and Monica Townsend	October 4, 2012	9:00 a.m11:00 a.m.	
Image Capture and Process (ICAP) (IDOCS)	Janet Mastroianni, Philip Porach, Amy Althauer, and Suzi Simpson	October 4, 2012	1:00 p.m3:00 p.m.	
Compliance Review Recovery Team	Kassi Hipwell	October 4, 2012	3:00 p.m 4:30 p.m.	
Streamline and Litter Tax	Cynda Johnson	October 15, 2012	2:00 p.m4:00 p.m.	
Compliance Out of State and Mainstream	Karen Erickson	October 16, 2012	9:00 a.m10:30 a.m.	
Revenue Accounting Follow Up	Robin Johnson, Joan Neff, and Binh Vu	October 16, 2012	4:00 p.m5:00 p.m.	
Fish, Tobacco, and Agreements Team	Angie Greene, and Chip Wilson	October 17, 2012	10:00 a.m11:30 a.m.	
Audit Selection and ECMS	Danielle Grindle, and Bryan Kelly	October 17, 2012	1:00 p.m2:30 p.m.	
System Liaison	Brad Grunenfelder, Nonnie Phan, Brenda	October 18, 2012	8:00 a.m10:00 a.m.	

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	Smith, and Debbie Vankirk		
Seattle Field Office Bankruptcy	Doug Houghton	October 18, 2012	1:00p.m3:00 p.m.
Seattle Field Office Tax Discovery	Trina Pennino	October 18, 2012	3:00 p.m4:30 p.m.
E-File	Rebecca Johnston, James Petit, and Brenda Smith	October 24, 2012	10:00 a.m12:00 p.m.
Kent Field Office Front Desk	Ruth Corpuz, Evelyn Mitchell, and Minh Tran	October 25, 2012	9:00 a.m11:00 a.m.
Federal Way Initial Contact Team	Vicki Johnson	October 25, 2012	1:00 p.m3:00 p.m.
Liaison External Stakeholders and Process Flows	Nonnie Phan, Brenda Smith, and Debbie Vankirk	November 6, 2012	10:00 a.m12:00 p.m.

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${\bf Appendix} \,\, {\bf C-Batch \,\, Programs}$

Statistics from Brad Grunenfelder as of 8/31/2012

BRMS – Business Registration Management System

HP Nonstop (TANDEM) only	http://en.v	wikipedia.org/wiki/Sour	ce lines of code
	programs	Source Lines of code	
Batch programs	69	133,188	
Server programs	60	215,852	
Requester programs	59	98,685	
Subroutines	7	2,158	449,883
SQL report writer	33	3,863	
DORCL Dept. of Revenue Control Language (like JCL)	52	11,659	
UBI - Unified Business Identifier			
Batch programs	5	8,031	
Server programs	9	11,905	
Requester programs	12	18,937	
Subroutines	0	0	38,873
SQL report writer	1	227	
DORCL Dept. of Revenue Control Language (like JCL)	4	1,456	
ET - Excise Tax			
Batch programs	143	283,197	
Server programs	105	211,332	
Requester programs	127	115,913	
Subroutines	6	4,284	614,726
SQL report writer	94	19,646	
DORCL Dept. of Revenue Control Language (like JCL)	74	34,007	
TARIS - Taxpayer Account Receivable Integrated System			
Batch programs	160	244,647	
Server programs	87	239,207	
Requester programs	66	77,925	
Subroutines	1	764	562,543

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SQL report writer	44	8,439	
DORCL Dept. of Revenue Control Language (like JCL)	46	19,041	
CRMS - Credit Management System			
Batch programs	90	140,289	
Server programs	43	83,046	
Requester programs	48	55,012	
Subroutines	7	7,601	285,948
SQL report writer	18	1,909	
DORCL Dept. of Revenue Control Language (like JCL)	27	8,409	
OSR - Outstanding returns			
Batch programs	21	30,993	
Server programs	8	21,149	
Requester programs	12	14,837	
Subroutines	0	0	66,979
SQL report writer	2	153	
DORCL Dept. of Revenue Control Language (like JCL)	9	5,270	
ACS - Automated Compliance			
Batch programs	51	91,945	
Server programs	30	42,051	
Requester programs	33	35,683	
Subroutines	5	3,113	172,792
SQL report writer	17	3,123	
DORCL Dept. of Revenue Control Language (like JCL)	27	5,697	
FD - Field Audit			
Batch programs	37	63,399	
Server programs	12	17,546	
Requester programs	13	16,770	
Subroutines	0	0	97,715
SQL report writer	0	0	
DORCL Department of Revenue Control Language (like			
JCL)	3	406	

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Appendix D – Development tools

11ppendin 2	20 (стор	
WA DOR supported: Windows Development Tools	Platform T = TANDEM MS = Microsoft	Description
Visible Analyst Icon		Strategic Planning, Data Modeling, Business Process Modeling (BPMN), UML Modeling, and Structured Analysis and Design Modeling In a Single Tool
Attachmate Extra 9.2		
Fiddler 2.4		
IronPython 2.73		
TamperIE 1.2		
Project 2007 Pro	1 - MS/T	Project management tools
Visio 2010 Pro	1 - MS/T	Modeling tool
Office Communicator 2005	1 - MS/T	A unified communications application that increase end-users productivity by enabling them to communicate and collaborate easily with others in different locations or time zones using a range of different communication options, including instant messaging (IM), voice, desktop sharing and video. Integration with programs across the Microsoft Office system.
Java JDK 1.7.0_07	1 - MS/T	
The View 2012	2 - T	
Outside View 7.2	2 - T	Terminal emulation software
Java JRE 1.7.0_07	2 - T	Java Run time environment
Eclipse Classic 4.2	2 - T	
TANDEM Non-Stop ODBC/MP 6.1	2 - T	
SQL 2005 Mgmt Studio/Tools	3 - MS	SQL Server Management Studio is an integrated environment for accessing, configuring, managing, administering, and developing all components of SQL Server.
SQL 2012 Mgmt Studio/Tools	3 - MS	RDBMS Management Suite
SQL 2005 SP4	3 - MS	RDBMS
Visual Studio 2005 SP1	3 - MS	An integrated development environment (IDE) used to develop console and graphical user interface applications along with Windows Forms applications, web sites, web applications, and web services.
Visual Studio 2010 Ultimate	3 - MS	Development Suite
Visual Studio 2010 Professional	3 - MS	Development suite
Visual Studio 2010 SP1	3 - MS	Development Studio, Latest version
MVC 3.0	3 - MS	Patterns-based way to build dynamic websites that enables a

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Clean separation or Concerns and trate gives you full control over markup for enjoyable, agile development. Includes many features that enable fast, TDD-friendly development for creating sophisticated applications that use the latest web standards. Team Foundation 3 - MS A set of enhancements, tools, and command-line utilities that increase productivity of Team Foundation Server scenarios. 10.0.41206.0 Adobe Reader 10.13 3 - MS PDF document reader DOR Fax Client 3 - MS Fax management Software 1.1.45 Right Fax Client and 3 - MS Fax Management Software Finter 9.4 Flash 11.4 3 - MS The Adobe Flash Player is software for viewing multimedia, Rich Internet Applications, and streaming video and audio, on a computer web browser or on supported mobile devices. Script X 6.5.439.50 3 - MS A multimedia-oriented development environment, although it does come with a built-in authoring tool, that is a general-purpose, object-oriented, multiplatform development environment that includes a dynamic language and a class library. Symantec Vault 3 - MS Integrated content archiving: store, manage, and discover unstructured information across the organization. BGInfo 4.16 3 - MS Tool to automatically display relevant information about a Windows computer name, IP address, service pack version. QuickTime 7.31 3 - MS An extensible multimedia framework developed by Apple Inc., capable of handling various formats of digital video, picture, sound, panoramic images, and interactivity. Silverlight 6.1.10411 3 - MS Microsoft Silverlight is an application framework for writing and running rich Internet applications, with features and purposes similar to those of Adobe Flash. Ghostscript 3 - MS Integrated Content pages, and interpreter for Adobe Systems' PostScript and Portable Document Format (PDF) page description languages. Its main purposes are the rasterization or rendering of such page description language files, for the display or printing of document pages, and the conversion			clean congration of concerns and that gives you full control
Increase productivity of Team Foundation Server scenarios.			features that enable fast, TDD-friendly development for creating sophisticated applications that use the latest web
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Printer 9.4 Flash 11.4 3 - MS The Adobe Flash Player is software for viewing multimedia, Rich Internet Applications, and streaming video and audio, on a computer web browser or on supported mobile devices. Script X 6.5.439.50 3 - MS A multimedia-oriented development environment, although it does come with a built-in authoring tool, that is a general-purpose, object-oriented, multiplatform development environment that includes a dynamic language and a class library. Symantec Vault 9.0.2.1061 Integrated content archiving: store, manage, and discover unstructured information across the organization. BGInfo 4.16 3 - MS Tool to automatically display relevant information about a Windows computer on the desktop's background, such as the computer name, IP address, service pack version. QuickTime 7.31 3 - MS An extensible multimedia framework developed by Apple Inc., capable of handling various formats of digital video, picture, sound, panoramic images, and interactivity. Silverlight 6.1.10411 3 - MS Microsoft Silverlight is an application framework for writing and running rich Internet applications, with features and purposes similar to those of Adobe Flash. Ghostscript 3 - MS A suite of software based on an interpreter for Adobe Systems' PostScript and Portable Document Format (PDF) page description languages. Its main purposes are the rasterization or rendering of such page description language files, for the		3 - MS	Fax management Software
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PostScript and Portable Document Format (PDF) page description languages. Its main purposes are the rasterization or rendering of such page description language files, for the	Silverlight 6.1.10411	3 - MS	and running rich Internet applications, with features and
between PostScript and PDF files.	Ghostscript	3 - MS	PostScript and Portable Document Format (PDF) page description languages. Its main purposes are the rasterization or rendering of such page description language files, for the display or printing of document pages, and the conversion
CutePDF Writer 2.8 3 - MS CutePDF is a proprietary Portable Document Format converter/editor for Microsoft Windows developed by Acro Software. The developers also produce CutePDF Writer (formerly Printer), a plug-in application which acts as a "printer subsystem" to enable Windows applications that have print capability to output documents in the PDF format.	CutePDF Writer 2.8	3 - MS	converter/editor for Microsoft Windows developed by Acro Software. The developers also produce CutePDF Writer (formerly Printer), a plug-in application which acts as a "printer subsystem" to enable Windows applications that have print
Lumension Patch 3 - MS	Lumension Patch	3 - MS	

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Agent 7.0.0.551		
Symantec Endpoint Encryption 8.2	3 - MS	An antivirus and personal firewall product leveled at centrally managed corporate environments security for servers and workstations.
Cisco VPN 5.0.7	3 - MS	Enables computers to connect to a virtual private network in a secure way as if the user was connected directly to that "private" network.
7-Zip 9.2	3 - MS	Zip Utility
BLS Image Viewer 7.2	3 - MS	Image viewer utility
FileZilla 3.5.3	3 - MS	File Transfer utility
Notepad++ 6.1.3	3 - MS	Desktop utility
Paint.NET 3.5.10	3 - MS	Image developer
Python 2.7.3	3 - MS	
ReSharper 6.1.1000.82	3 - MS	
Tomcat 7.0.29	3 - MS	
Visual Inspect 2.4	3 - MS	Image utility
WinCDEmu 3.6	3 - MS	
WinSCP 4.3.9	3 - MS	
Client Work	4 IDocs/IPAC	Unisys eWorkflow/Imaging
Manager 8.2		

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${\bf Appendix}\; {\bf E} - {\bf Data}\; {\bf Sheets}$

Appendix E Data Sheets